

Australasian Association of Psychology and Philosophy

VOL. VII.

MARCH, 1929.

No. 1.

SOME ASPECTS OF MODERN THOUGHT.¹

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WILLIAM JAMES says of Philosophy that it is a sort of fecundation by one another of logic, science, religion and poetry, and we may start from this description, since it is merely with certain main aspects of thought that we are to deal. The emphasis in this statement on logic insists that philosophy rests on reason alone; it differs from science mainly in the fact that it is concerned with those generalities that science leaves alone; but, as opposed to science, it has a tender regard for those values on which religion, ethics and æsthetics rest, so that philosophy extends reason beyond its use in the empiric sciences to stabilize the world of values as well as the world of fact. To understand, then, the cross-currents of the thought of any period it is necessary to start from the point of view of philosophy. Philosophy endeavours to correct the dogmatisms and false abstractions of science; it is on the fields of philosophy that the eternal warfare between science and religion must be waged; and philosophy again ranks itself on the side of that fuller experience of life which rests upon feeling and intuition and which is expressed by poetry and art. Philosophy has, of course, many aspects, but we shall concern ourselves only with that side of it which brings us into closest touch with scientific thought.

In any age some department of thought, such as physical science or religion, may create a view of the world, a cosmology, which it is the duty of philosophy to criticize. It is a characteristic of modern thought that science has developed, as the culminating product of three centuries of exact investigation, a cosmology incompatible with and opposed to the older cosmologies founded on value. It is therefore, we must be careful to note, not only in respect of the world of practice but also of ultimate theory, that this modern period is

¹ Presidential Address delivered before the Canterbury local branch of the Australasian Association of Psychology and Philosophy on June 13, 1928.

rightly named the scientific age. The mechanism of science has awakened philosophy to a new endeavour of attack and defence, an attack on the limitations, abstractions and implicit dogmatisms of science and a defence of the universe of values. It is here that Whitehead, in his recent notable book "Science and the Modern World," finds "the overwhelming importance of a prevalent philosophy," and in this reference speaks of philosophy as the most effective of all intellectual pursuits. It is a noteworthy fact that in this strife science and philosophy are not falling apart but are coming closer together, that scientists are seeking a philosophy to supplement their scientific method, and are themselves, in notable instances, becoming philosophers. It is an outstanding mark of the more recent thought that the examination into brute fact which is the special work of science, is being supplemented by that kind of generalization which was formerly the prerogative of philosophy. Thus Professor Whitehead, speaking of the characteristic mentality of our own age, says: "It is this union of passionate interest in the detailed facts with equal devotion to abstract generalization which forms the novelty in our present society. . . . This balance of mind has now become part of the tradition which infects cultivated thought. It is the salt which keeps life sweet. The main business of universities is to transmit this tradition as a widespread inheritance from generation to generation." Notable words that should be inscribed on the walls of every place of learning throughout the world. It is perhaps only fair to add that it is not merely a change of heart that has led scientists to cultivate this new love for abstract generalization, but the fact that the old foundations on which physical science rested have broken down, together with the allied fact that the mechanistic method of science, aiming at universal sway, has been found to fail in its task. The bottom has fallen out of the old physics; the conceptions on which science rests—space and time, matter, ether, electricity, organism, structure, and the rest—are all in process of being remodelled; and mechanism, as an explanation of living organisms, is being forsworn.

To understand the relation between science and philosophy here we must review briefly the nature of scientific method. The victorious march of science during the three centuries since Galileo can be accounted for in terms of that analysis of the facts of Nature which arose as a revolt against the rationalism of the Middle Ages. Remembering that scientific explanation means nothing more than the exact description of what happens, we can see that the postulates of that analysis were simple enough. Given a purposeless matter of which Nature was composed, the problem was merely to analyse out, by means of hypothesis and verification, the material conditions that

produce any phenomenon, these material conditions themselves being likewise resolvable into former conditions, and so on *ad infinitum*. Nature thus becomes a mechanistic chain of cause and effect, everything being explained or explainable in terms of mechanics, physics and chemistry, that is to say, fundamentally in terms of matter and motion. All phenomena are ultimately reducible to "movements of mass particles in space." This, in simple terms, is that famous method of science, the enormously fruitful results of which are the wonders of the present age. Was it any wonder that science, beholding these results, boasted that here was the secret of things, and proceeded, with implicit dogmatism, to transform this method into a theory of the universe, scientific materialism, capable of explaining, or explaining away, the facts of living organisms, of mind itself, and the values of human life? But a nemesis was on the track of this all-conquering method. That very matter which it set out to explain has dissolved under its hands, life has refused to come under its sway, and mind has turned upon it and wrested from it its pretensions.

The most recent investigation of the new physics has shown that in the planetary system of the atom, with its hypothetical ultimate entities of proton and electron (hypothetical because, of course, not given to observation, but conceptions framed to explain the radiation and absorption of energy observable in the atom), the orbit of the electron round the proton is discontinuous, that is to say, the electron does not continuously traverse its path in space, but occupies a series of separate positions, just as though a train should reach its destination, not by travelling continuously, but by a series of jumps, and disappear between the jumps. This being so, science reaches a conception of discontinuous existence in space, which is evidently incompatible with the conception of matter as a continuous existence of material entities from which it starts out. The ultimate hypothesis to which science seems to be driven is that what we call matter resolves itself into vibration. The apparent stability of matter is explained just as we explain a steadily sounding note in music as the result of vibrations in the air, that is to say, each element making up the stable atom is a vibratory ebb and flow of an underlying energy. But this energy of the physicist is itself an abstraction, and we are left, it seems, with vibratory organisms as the ultimate stuff of the universe. The ultimate stuff of Nature, then, from the point of view of physics, is an organism of vibration non-existent at any given point of time and existing only as an interchange of ebb and flow. This is to take us far from the old idea of matter as consisting of the mechanistic interplay of separate independent particles. The ultimate analysis of the inorganic world brings us to an organism, and, as we proceed upwards, the inorganic

appears through and through as organic. The primordial elements, the electron and proton, are vibratory organisms; the atom is an organism consisting of interrelations of proton and electron; the molecule is an organism of atoms in interrelation; the molecules issue in the organism of the crystal, and so on upwards. This is to go far from mechanism, and seems to show that the mechanistic conception of Nature is a false abstraction got from an analysis of the elements to the neglect of their synthesis under systems or wholes that determine their function and give them meaning together. This conception of inorganic Nature as an ascending scale of organisms is common to a number of contemporary thinkers, who seem to have arrived at it independently of one another. We find it presented under slightly different aspects in Smuts' "Holism and Evolution," Lloyd Morgan's "Emergent Evolution," Whitehead's "Science and the Modern World," and Lossky's "The World as an Organic Whole." In all the inorganic world becomes in essence organic. Holism, according to Smuts, Organic Mechanism, according to Whitehead, is the principle governing alike inanimate nature and the world of living organisms.

It is when we come to the world of vital phenomena that the mechanistic explanations of science are plainly seen to fail it. In the heyday of scientific conquest the sciences of living organisms, biology and physiology, boldly accepted the mechanistic interpretation of the phenomena of life in terms of physics and chemistry. And this method in these sciences was not only necessary but enormously fruitful. Much light has been thrown on the complexity of structure and function in living bodies by a mechanistic analysis into the same chemical elements as we find in the physical world. The living organism has been looked upon as "a complex system of physico-chemical mechanisms." But the total result of the last fifty years of biological and physiological inquiry has been to bring utter discredit on the mechanistic interpretation of life. "The main outstanding fact," says the physiologist Professor J. S. Haldane, "is that the mechanistic account of the universe breaks down completely in connection with the phenomena of life. Physico-chemical explanations of elementary physiological processes are as remote as at any time in the past, and they seem to physiologists of the present time far more remote than they appeared at the middle of last century." He says again: "As a physiologist I can see no use for the hypothesis that life as a whole is a mechanical process. This theory does not help me in my work; and, indeed, I think it now hinders very seriously the progress of physiology; I should as soon go back to the mythology of our Saxon forefathers as to the mechanistic physiology." When we find, again, Sherrington

in his great work "The Integrative Action of the Nervous System" speaking of Physiology as "self-wounded by its neglect of purpose," we see clearly what way the wind is blowing for mechanism as applied to life. Throughout the sphere of Biology generally, indeed, there is a growing opinion that the prevailing mechanistic interpretation of life of the last half-century has been a mistake, and that the accepted concepts of science are not sufficient for the explanation of vital phenomena. "The formulæ of physics and chemistry," says Professor J. Arthur Thomson, "do not suffice for answering the distinctively biological questions." In biology "we need new concepts." "Biology," says Hans Driesch in "The Science and Philosophy of the Organism," "is not applied Physics and Chemistry; life is something apart, and biology is an independent science." It is becoming more and more obvious to Biology itself that the self-directing power of organisms, their autonomy, cannot be explained in terms of mechanism. Such facts as the co-ordination of the cells of the living organism for the sake of the whole (we are told by one authority that in the development of the embryo every cell acts as if it knew what every other cell was doing), and in particular the restitution of function and regeneration of lost parts, will not, it is evident, find a place under any mechanistic hypothesis. Professor Haldane speaks of the recovery of functional activity after destruction in the central nervous system, where, of course, differentiation of function is at its most complex, as in this connection a fact of extraordinary significance. It is not surprising, therefore, that recently there has been a pronounced revival of vitalism in Biology in the form of neo-vitalism, as in Hans Driesch and others, in which a vital principle is used for the final explanation of organic behaviour. A crude vitalism appeared very early in the history of Biology, a vitalism which, face to face with the complexity of organic structure and function and unaware of the possibility of the mechanistic approach, straightway affirmed a mysterious vital principle in explanation; but neo-vitalism admits description in terms of the mechanisms of physics and chemistry as far as such description will go, asserting at the same time that such description can give us no ultimate explanation of the behaviour of organisms. Neo-vitalism finds it necessary to postulate an organizing agency in life that controls, in the interests of the organism as a whole, the physical and chemical mechanisms of its processes. Yet it seems obvious that this vital principle is still a mystery principle, called in merely when mechanism fails, not a principle of explanation itself, and many leading biologists and physiologists, however they dissent from the mechanistic hypothesis, refuse to accept vitalism. "The vitalistic theory," says Professor Haldane,

“is only a way of registering the failure of the mechanistic hypothesis, and does not help us to a real understanding.”

Vitalism is, in essence, an attempt to explain the purposiveness of the living organism, to explain life in terms of purpose, and this brings us to the heart of our difficulty. How far are we justified in speaking of purpose as governing the life of organisms? It is evident that if we deny the complete sway of mechanism, we must affirm in some form purpose, but yet it is easier to deny mechanism than to maintain purpose. We have, of course, an inveterate tendency, springing out of the experience of our own life of conscious purpose, to look at all things in Nature purposively, to consider, that is to say, that they have been created for a purpose. Just as from the consideration of the interrelation of the parts of a steam-engine we are led to the conclusion that, though each part acts mechanically, the whole has been constructed for a purpose by some designing, creative mind, so in the case of an organism such as a tree or a human body, we reason that the separate organs and the whole organism have been created for a purpose by an infinite, creative mind. But it is certain that our universal acceptance of the principle of evolution and of the fact of adaptation of organism to environment, to mention no other reasons, forbids us accepting nowadays Paley's simple watchmaker theory of the universe. Not even the ancient philosophies of Greece with their wholehearted acceptance of teleology in the universe understood purpose in this sense. With Aristotle, for example, organisms were governed by purpose, but it was an inner dynamic purpose, not a purpose imposed from without in this way. We cannot then, for example, reason from the perfection of the eye in seeing that the eye was specially created for that purpose. But the more recent thought has a new way of expressing the purpose governing organic life, offers us a new teleology. Thus, with regard to the eye, it asserts that the parts of the eye came into existence, not because of a mechanical play of molecules, but because necessary to the act of seeing. That is to say, it here calls to our aid a new kind of synthetic causation, a view of causation different from that analytic causation which governs physical science, the view, namely, that the whole determines the parts, the end the means. That which comes last is here the cause, what precedes is the effect. Thus the form and arrangement of the cells of the human body are determined by the organism itself as a whole. The behaviour of the organism is dependent on its organs and their functions, but these in turn are possible only in and through this organism. Thus an organic whole is very different from a mechanical whole like a watch where the parts are merely put together to make the whole, because the parts in the former are conditioned by the whole and only possible

through it. From the point of view of this kind of teleology forms, wholes and values are the realities of the universe, atoms, cells, matter simply the means by which they are realized. This point of view is being much stressed in recent thinking. Smuts' whole contention in his "Holism and Evolution" is that the evolutionary process consists of the progressive creation of new wholes, new structures which themselves explain the means preparatory to them, incapable themselves of being explained in terms of the mechanism of the parts that they emerge from. With Whitehead organic mechanism, as we have seen, rules the inorganic as well as the organic world, and he sees in this principle the only way of combating the mechanistic hypothesis. Whitehead calls the nineteenth century the century of muddled thinking, because the thinkers then never clearly recognized the incompatibility between mechanism and the self-determinism they attributed to organisms. In what he calls the romantic reaction of literature against the abstract mechanisms of science, the poets in their rebellion never clearly grasped the application of the mechanism to man. Thus, Tennyson, who represents most clearly in that period the reaction of poetry on science, speaks with something like dismay of the blind running of the stars, but Tennyson, appalled as he was by the problem of mechanism, never really carried that problem into the region of body and brain, never faced the fact that the cells of body and brain might also blindly run. But if they do, if you allow, that is to say, that each molecule of your body is in itself determined to be what it is and its blind run determined by mechanical law, then to add mind to the body can make no difference. The mind is then mechanically determined, mental changes being the mere accompaniment of brain changes. You escape the difficulty, Whitehead contends, only when you assert that the molecules of the body do not blindly run, but are determined to be what they are in structure and function by the organism of which they are a part; that is, only when you assert organic mechanism.

The question of the creation of new wholes in the cosmic process naturally leads to another question at issue between science and philosophy, the question namely of Evolution. While evolution has become a universally accepted principle of explanation in all departments of thought, the genetic method of science has become a commonplace, and while organic evolution is now, thanks to Darwin's great contribution to thought, universally accepted as a fact, it is necessary to remember that we are still left by science largely in the dark as to the method of evolution. Biologists are at present much more hesitant about this question than they were fifty years ago. In fact, when we inquire into the matter, we find that of Darwin's famous principle of Natural Selection,

which was supposed to explain the origin of new species, there is almost nothing left except the fact embodied in Herbert Spencer's phrase, "the survival of the fittest." Thus we are told in Geddes and Thomson's "Evolution" that the function ascribed to Natural Selection "is practically reversed. It exchanges its former supremacy as the supposed sole determinant among practically indefinite possibilities of structure and function for the more modest position of simply accelerating, retarding or terminating the process of otherwise determined change." And if we ask what then determines evolutionary change, the answer is plainly, science does not know. "The causes of the evolution of life," says another writer, "are as mysterious as the law of evolution is certain. . . . We know to some extent how plants and animals evolve; we do not know why they evolve." The fundamental trouble here again seems to lie in the mechanism of science, the various theories of evolution, all mechanistic in principle, having served the purpose of largely annulling one another. It is, of course, impossible in a paper like the present to go into the details of this matter; but a sketch of the history of evolutionary theories may throw light upon the difficulty. Of the two principles governing Darwin's theory, Variation and Natural Selection, it was always the external factor of natural selection that was emphasized by Darwin, the internal factor of variation being presupposed as a fact for selection to work upon, and left by him largely a mystery. This over-emphasis of the external factor, acting on organisms from without like some physical force, at once led to the idea, in the scientific and popular mind, of a mechanics of evolution, which seemed to offer an easy, though of course illusory, explanation, but left the mystery of the arrival of the useful variation unsolved. Further, it has been pretty clearly shown since Darwin's day that even as a mechanistic account of the external factor his theory fails to show how small variations at their outset could possibly be selected. The Darwin hypothesis will accelerate natural selection when once set going, but will not set it in motion. The theories succeeding Darwin's, following blindly its mechanism, had in common the stressing of the internal factor of variation, and their problem was the apparently mistaken one of discovering the mechanism of variation. First came Weismann with his famous Germ-cell Theory, the essence of which was that the real cause of evolution was the internal factor of variation which found its source in the germ cells of the organism. For our present purpose the essential thing to note is that, with Weismann, the germ cells were entirely independent of the body cells that make the individual organism, that it is in the mechanism of the germ cells themselves that the source of variation is found, and that therefore characters

acquired in the life of the individual, being uninheritable, can play no part in the process of evolution. In this double mechanism of his theory, in the fact namely that he finds the source of variation in the mechanism of the germ cells themselves independent of any external factors, and in the fact that the germ cells are completely independent of the individual organism, having no organic relation to it, Weismann not only cuts completely away from Darwin, but makes it impossible to understand how progressive development of organisms can take place, since we are asked to believe that evolution depends on fortuitous variations in reproduction remaining unaffected by race experience. If every individual, as this theory postulates, has to learn again from the beginning, how is organic progress to be explained? Weismann himself came to admit the difficulty, and framed his Germinal Selection Theory, which postulated selection at work among the elements of the germ cell, and thus gave the individual some indirect influence in shaping evolution. But such a hypothesis could be only guesswork, and has been accepted by no other scientist. After Weismann came De Vries with his Theory of Mutations, that is, sudden, great, accidental variations as the main source of evolutionary progress. (We may put on one side for our purpose the hypothesis of the Mendelians that the process of evolution is to be accounted for in terms of the interchange of definite pre-existing unit characters, as this hypothesis is not a general theory of evolution since it does not deal with the origin of new characters, but merely with the behaviour of existing characters.) It is evident that the ultimate effect of the theories of Weismann and De Vries is to negate Darwin's Natural Selection. If with De Vries all natural selection has to work upon is the rare happening of accidental mutations, the evolutionary process becomes so miraculous as to become incredible, and if, as Weismann asserts, modifications acquired in the lifetime of the organism, being uninheritable, can play no part in the formation of new species, how can we be brought to understand the adaptation of species to their conditions of life, since there can be nothing in common between natural selection and such variations as occur. Darwin's theory of the development of small variations by the slow operation of natural selection was at least much more fitted to explain the delicate progressive adjustment of organism to environment than these later theories.

The plain fact is that Biology at the present time is profoundly at sea with regard to the whole matter. Variation has come to be seen to be much more important in the evolutionary process than natural selection, and the struggle for existence which Darwin emphasized is now recognized as

exceptional in organic nature, not its normal procedure. The growing science of Ecology is placing selection in the background and emphasizing the silent, transforming influence of environment on organic life. It is no wonder that there has been a return on the part of certain biologists to Lamarckism, that is to say, to the hypothesis that, despite Weismann, characters acquired through use in the lifetime of the individual can be transmitted through heredity. Others, who still abide by natural selection, hold that variations in Nature do not take place in the haphazard method required by Darwinism, but in a definite determinate direction, as though Nature had some goal before it. The extremist here asserts even that organisms would have developed much as they have developed, even if there had been no struggle for existence, and geological and climatic conditions had been quite different.

What, then, is the prevailing attitude of philosophy at the present time to this matter of evolution? Philosophy finds the difficulty of science here again in the mechanistic conceptions it applies to organisms. Thus Smuts, in his "Holism and Evolution," finds the whole trouble of science in the neglect of the study of the living organism as a whole, in its isolation of separate characters as though they were mechanical components of the whole, in forgetting, in a word, that the organism as a whole is an active factor in controlling the function of its parts. An organism is a living unity, carrying within itself the principle of its own self-maintenance and self-development. It causes within itself its own unrealized future, which issues organically from its past, and variations arise as the tentacles it throws out, under stimulation for environment, towards the future. We can best see the significance of this in itself somewhat abstract statement, if we compare the point of view here contained with that of Darwin. There are two great difficulties which Darwin's principle of Natural Selection is unable to meet. The first is the difficulty of understanding how small variations at the outset can possibly be maintained by selection. This difficulty vanishes if we remember that the variation is not an isolated character added on, as it were, to the organism, but issues from the organism as a function of the whole, has, in the struggle for existence, the backing of the organism behind it. It is the result of use and practice of generations of individuals, it embodies a trend of organic life. This doctrine of explanation in terms of the organism as a whole is at once seen to dissent from the mechanism of Weismann, who isolates the life of the germ cell from the life of the organism so that it cannot transmit the result of use on the part of the individual; according to Smuts's doctrine of Holism, it is impossible to maintain that the life of the organism cannot ultimately modify the life of the germ cell. The second difficulty is one not recognized by

Darwin, but one under which the hypothesis of natural selection breaks down, the difficulty arising from the fact that variations usually appear, not singly, but in associated groups. One variation brings other consequential variations in its train? Now how is it possible to suppose that natural selection is here competent not only to select all the associated small variations, but also their joint and associated functioning? The theory of natural selection forgets the all-important fact of the co-ordination of structure and function, which is the essential element in organisms. We can account for the origin of variations in associated groups of structure and function only in terms of the organism as a whole. They represent a trend in the forward march of the organism itself, and this advance is not confined to a single point, though the noticeable variation may be the first indication of the inner movement. Variations then, whether singly or in groups, can maintain themselves in the beginning only through the organism, because they lie in the main line of development on which the organism is travelling; they have, as it were, the whole weight of the organism behind them. We have what Smuts calls Holistic Selection as distinct from Natural Selection. We must note, however, that in this theory natural selection is still left a place, though a subordinate one; when the variation is well on its way, then natural selection comes to lend its support.

I have dealt at some length with Smuts's point of view here because it fairly represents that synthetic point of view by which the wider view of philosophy finds it necessary to supplement the analytic view of science. But it is characteristic of philosophic thought at the present day that it extends the sweep of this principle of creative or epigenetic evolution, that is, the production of new features by a creative process inherent in things, not a mere evolving of what is contained implicitly in the old, to cover not only organic life, but the whole of the cosmic process. This new wide-sweeping hypothesis of Creative or Emergent Evolution attempts to solve the old cosmological problem of the relations between matter, life and mind. The aim of this theory is to exhibit the cosmic process as a continuous process of evolution, to remove the absolute breaks that occur in the older cosmologies between the inorganic, the organic and mind, and to exhibit the later forms as emerging from the old as new structures or organizations, as new forms of relatedness, as Lloyd Morgan has it, or, to use Smuts's expression, as new wholes which emerge as creations, since they cannot be resolved again by any form of analysis into the conditions from which they arise. Thus life emerges from matter and mind from life, but this does not mean that life and mind are merely different degrees of complexity in the clash of atoms; they represent stages of emergence of new

values in the universe. This theory is again, it must be noted, essentially a protest against mechanism; it wishes to assert that by no mechanical collocation of molecules, however complex, could life emerge, and by no mere complexity of brain cells could consciousness come about; life and mind are new creations that no mechanistic method by analysis of prior conditions could discover. This hypothesis, while maintaining continuity through the evolutionary stream, seems, it must be confessed, to leave the mystery of the difference of these forms of existence where it was. New structures are created, but how and by what agency? Alexander, in whose great work "Space, Time and Deity" the conception of emergent qualities first appears, says that we must be content to accept this fact with what he calls natural piety. Lloyd Morgan is driven, in spite of his agnostic, scientific attitude, to point God as the cause of the Cosmic Process, God as the *nisus* drawing the world, as it were, up to Himself, lifting it from level to level of existence. Here we seem to have a return to Aristotle's assertion of God as the Final Cause of the universe.

The common assertion of this evolutionary philosophy, whether presented to us by Alexander, Lloyd Morgan, or Smuts, that it is mind in the form of human personality that is the highest product created by the evolutionary process, leads naturally to the question of the part that the investigation into man's mind itself plays in modern thought, and indeed one cannot glance, however briefly, at the main cross-currents of that thought without insisting upon the importance of that new preoccupation with man's own nature that modern Psychology has been mainly instrumental in producing. Not only has the study of mind thrown new light upon the place of mind in Nature—Psychology, for example, by its repercussion upon Physiology and Biology has been largely influential in bringing into discredit the mechanistic hypothesis that formerly wholly controlled these sciences—but that intense investigation of mind itself, both conscious and unconscious, which marks modern Psychology, is throwing a light upon man's personality, both as to its heights and depths, which is already affecting our views and attitude in other departments of thought, in medicine, in religion, in ethics, in law. What is nowadays somewhat loosely called the New Psychology—Psychology, of course, has a long history behind it, and the main body of its knowledge is by no means new—consists partly of a more exhaustive inquiry into the primitive basis in feeling and impulse of the human mind, and partly of a new positive investigation into the unconscious mind for its own sake. Neither of these points of view is, of course, wholly new. What is new in the first is its insistence upon the importance, for our knowledge of human nature, of the emotions and impulses we have in common

with the animals as the prime movers of human activity, and, more particularly, of those feeling-dispositions, which Psychology calls Sentiments, which centre round ideas and become the controlling element in our nature, reducing to order the chaotic life of emotion, generating higher forms of emotions, and making possible a life governed by ideals. The psychologists Shand and McDougall have exhibited clearly to us for the first time the psychology of personality as an organic result of interaction between the emotions and the sentiments, this interaction issuing in an ordered character governed by ideals and determined by will. The idea of the completion of personality as the supreme end of life is one we owe originally, of course, to the ethical thinker; what is new is the filling in of the picture by modern Psychology and the practical insight it offers into the means of promoting the end of personality. There is developing in modern thinking what we may call a new cult of personality for its own sake. It seems also that we may shortly see the rise of a new science of individuality, for which Ward suggests the name Characterology, and Smuts, Personology.

To come next to the unconscious elements in personality, it has been said that the discovery of the unconscious has been to Psychology what the discovery of America was to the Old World. This is an exaggeration in statement: it must be noted that we do not owe the discovery of the unconscious to the new psychology; what we owe to it is the positive examination of the unconscious for its own sake. Psychology has always used the hypothesis of the unconscious as needful for the explanation of conscious life itself—it is evident, for example, that we cannot describe the simplest facts of memory without making use of this conception of the unconscious; but the discovery by such investigators as Janet and Prince that an unconscious mind could separate itself off from the conscious and exist more or less independently of it, so that we may have the phenomena of Double Personality and Alternating Personality, in which the individual becomes two different persons, having different feelings and desires, and even different ideas, marked the beginnings of a new and very important development in the study of mind. Freud's great contribution was his discovery, through his investigation of nervous and mental disorders, how elements may become dissociated from consciousness or from complexes in the unconscious which, unknown of course to the individual, may profoundly disturb conscious life and become the cause of abnormal or criminal manifestations. It is always the repression of feeling, of some experience intensely painful to the individual, as of fear that he is ashamed to show, that is the cause of the formation of complexes which, through repression, may sink deeper and deeper into the unconscious and evince themselves

after perhaps a lifetime in some nervous disorder, phobia, or crime. This is the pregnant fact, made good beyond dispute through its application in medicine to the cure of diseases, that gives us the essence of Freudianism. Of the ultimate fate of Freudianism it is perhaps too early to speak definitely. Many of Freud's own hypotheses have already gone by the board, and, in particular, his insistence on sex-repression as the sole cause of the formation of complexes has been shown by much recent investigation to be misplaced. Brown, the psychopathologist, in his most recent book, tells us that seventy per cent. of the cases examined by him gave no sign of sex-repression as cause of the dissociation present. Yet whatever may be said of the Freudian system itself, there can be no doubt of the new significance this line of investigation gives to the part played by the unconscious mind in personality. Not only has it given a new method of approach in medicine, but it has great significance in modifying our point of view in all those spheres of thought that have to do with the judgment of men's activities in Ethics, in Law, in Religion. In the unconscious, which not only hides away in darkness the bitter growths of a man's past, but also, according to Jung, is the storehouse of the memory of the race that has produced him, in those underground dungeons of the castle of personality, what hidden forms may lurk, malignant shapes waiting at the door of consciousness, ready to rush in and disrupt it with their foul presence, and cause some catastrophic action for which the individual may be not responsible or not wholly responsible. One feels chary of admitting that a man may commit a crime in a complete state of dissociation so that his conscious self is in no way responsible for it, yet this is a question that is bound, it seems, to have more and more significance in law. However that may be, in that long slow process by which moral and legal judgment has passed from the mere external act, the thing done, to the state of mind, the motive behind it, shall we ever reach such a stage of knowledge as will enable the specialist to determine the degree of responsibility and guilt of the agent? At least our judgments of our fellows, increasing always in humaneness with the moral progress of the centuries, cannot fail to be modified further in this direction by our deepening knowledge of the unconscious elements governing conduct. In religion also, abnormal psychology has not only changed our point of view with regard to many extraordinary facts of religious experience, enabling us to give a natural explanation of what was formerly attributed to supernatural agencies, but has also greatly modified our conception of what is involved in the fact of sin. There is a danger, of course, in this. With the acceptance of the Darwinian theory of the descent of man from the ape, there had already arisen an inevitable tendency to look upon

sin not as a falling away from grace, but merely as the remains of the animal nature in man, to explain it from below instead of from above, and now, added to this, we find a growing tendency to look upon sin merely as an abnormality, a kind of sickness, to explain it in terms of complexes instead of in terms of a defect of human will. In each case, of course, the two conceptions may be held together. Sin may be at once regarded from below and from above, from the point of view of man's ascent from the animal and from the point of view of his ascent to God, the important thing to remember being that the latter is the more ultimate conception. Again, what we call crime may be a conscious deliberate offence against man's higher nature, or much more rarely, an abnormal result of the separation of the unconscious and conscious elements in man's personality. It is not likely that growing enlightenment will ever forget to make this distinction. Abnormal repression, resulting in complexes, and conscious control over our lower natures, are things coming under two different categories. Mankind, in general, is never likely to lose sight of the fact that the greater part of what we call sin is the result of man's weakness and selfishness, nor to forget that restraint and gentleness are the twin banners under which moral progress marches to its goal. With increase of knowledge the validity of moral judgment will appear with increasing clearness.

I am naturally led by the questions already discussed to that question which has vexed every era of modern thought, the question of the relation between religion and science. It is sometimes said by religion that the collision between science and religion is a thing of the past, or by science that it is at an end because the lion has lain down with the lamb, the lamb being inside the lion. I am afraid that neither of these points of view may be maintained. The conflict is as real as ever: indeed a noted scientist in a recent book has said that only the outskirts of the battle have been fought. If that is so, it is at least some comfort to remember that the two antagonists involved will neither of them ever be defeated, the need for the satisfaction of religious feeling is as ultimate as the quest for truth, and religion and science are the two strongest forces, as Whitehead reminds us, that influence men. There are some things we must carefully remember in speaking of this matter. We must remember that there has always been a conflict between science and religion, that both religion and science are always in process of development, and that the conflict between them has always been ultimately a gain to religion. The interaction with science is a gain to religion because only by this means are its essential elements sifted out from the accidental, extraneous imagery that it borrows from the cosmology of the day. It is only in this way that religion gradually attains to purer and

purser expressions of its fundamental truths. Thus it was a gain to religion when it accepted the cosmology of Copernicus, and again when it accepted the principle of evolution. But religion has never been able to see this clearly, and this was natural and perhaps inevitable. Religion rests fundamentally on feeling experience, and feeling is the conservative element in human nature; religion clings to the old forms, and has always tended to find the essentials of religion in these forms rather than in what lies behind them. In science, when two theories clash, this is looked upon as an opportunity for the discovery of new truth, but religion in the past has always hailed the discovery of a new point of view as a disaster: its attitude towards science has been one always of attack and defence. What religion must do, if it is to keep its power over educated men, and what, it appears, religion is slowly learning to do, is to accept the new in the same spirit as science accepts it. What then has happened to produce the modern sharp conflict between religion and science is clear. The last three centuries have been pre-eminently the era of scientific achievement, in which a vast increase of exact knowledge about Nature has revolutionized our ideas about the universe. To show what is meant it is sufficient merely to enumerate a few names—Copernicus, Galileo, Kepler, Newton, Darwin, Einstein. Astronomy, Geology, Biology, Psychology have profoundly changed our views about the place of man in the universe. Yet, while this change in man's outlook has been in course of being brought about, when man's life has been shown to be linked on to those lower organisms which have somehow evolved in a planet which lies like a speck amid the immensities of space and time, religious expression has striven to remain couched in terms suited only to times when it was believed that the earth was the fixed centre of things. Clinging to the old cosmologies, religion has all along been fighting a slow, inglorious retreat, in which it has been forced to give up one position after another, each position at the time having been proclaimed as vital for religion, afterwards to be given up by a church confessing to a new insight gained by doing so. The result has been not only to bring religious leaders into intellectual disrepute, but during the last fifty years to bring about an acute conflict between the teaching of religion and that new mentality of the age that the three centuries of the scientific era have produced. It is an axiom that organized religion can appeal to the enlightened man only when it is built round the cosmology of its own times, that is, that cosmology which the long conquest of science has given us. Only then will it come to full life again. Religion must then join hands with science in the quest for truth, and happily there are not wanting signs that this is taking place, that indeed religion and science

are reaching out hands to one another in a new spirit of reconciliation. Religion is adapting itself more and more to science, and science itself is seeking a new religion. To discover this, we have merely to turn to much contemporary literature. A new voice demanding the fearless quest of truth is being heard in the church. "Whatever the consequences," says Bishop Barnes, "we must accept truth by whomsoever it may have been discovered. A religion not based on truth is vain. A faith that fears the progress of knowledge anticipates its own dissolution." A new note of humility is also being struck by religion and science alike, and this, it must be confessed, was much needed on both sides. "The chief task of religion," says Professor J. S. Huxley, "in helping to build up the unified thought of the future is to abandon the intellectual arrogance of its theology and to take a leaf out of the book of science as to the methods by which truth may best be pursued; while the chief task of organized science in the same quest will be to enlarge its bounds, admit that the highest flights of the human spirit are as much realities as the routine activities of the human body, or the doings of the atoms and molecules of lifeless matter, to recognize for what they are the realities on which the religious life is based, to see religious values." And, if certain eminent scientific writers at the present day are demanding a new religious viewpoint at which organized religion looks askance, it is still much that they are seeking a religion, and we must remember that the intellectual framework of religion may change much, and yet religion remain vital. Thus Huxley wishes a religion without a personal God and without immortality. Defining religion as "the sense of the sacred," he tells us that the religious view of God and all its corollaries seem to be the one essential point of difference between science and religion today. "The rejecting the idea of God as a supernatural being is the only way of bridging the gap between the religious and scientific approach to reality." And, if this form of religion seems too strong meat for many, who think with justification that round the conception of a Personal God religion stands or falls, yet we cannot tell how far the conception of God may be remodelled by future ages. Huxley quotes from Canon J. M. Wilson in "The Modern Churchman": "I cannot but say that I believe that some day our conception of God will have become independent of all that has come into it from the punitive Jewish tribal and other pagan conceptions of God which have passed into Christianity, and that our conception will be constantly renewed and growing from all human knowledge and experience, from all science, philosophy, and psychology." Yet, however much its creeds, dogmas and forms may change in the future, religion need have no fear for its onward march. "Religion," says Whitehead, who, we must

remember, is himself a mathematician and physicist, "has emerged into human experience mixed with the crudest fancies of barbaric imagination. Gradually, slowly, steadily the vision recurs in history under nobler form and with clearer expression. It is the one element in human experience which persistently shows an upward trend. It fades and then recurs. But, when it renews its force, it recurs with an added richness and purity of content. The fact of the religious vision, and its history of persistent expansion, is our one ground for optimism. Apart from it, human life is a flash of occasional enjoyments lighting up a mass of pain and misery, a bagatelle of transient experience."

AN INTERPRETATION OF CROCE'S ÆSTHETIC.¹

By NORMAN PORTER.

IN his "Philosophy of the Spirit," Croce distinguishes two fundamental activities, the theoretical and the practical, each of which is subdivided into two grades, the theoretical into intuitive and conceptual, the practical into economic and ethical. In a progressive order, the second grade is dependent on and draws its material from the first, the third on the first and second, and the fourth on all the others.

The primary function of the human mind is to create intuitions; this is the first level of the theoretical activity. Its product is the knowledge of individuals, while the succeeding logical activity produces concepts or knowledge of universal relations. Intuitions and concepts are the entire production of the theoretical activity, and the science of the first is æsthetic.

Examples of intuitions given in the *Estetica* are "an impression of moonlight, sketched by a painter; a musical motive; the words of a lyric."² All of these are strictly individual intuitions, a type of knowledge that is logically prior to conceptual thought. Concepts depend for their intelligibility on the intuitions, without which they are empty; but the intuition without the concept is not blind. In Croce's phrase, "it has its own eyes."

Intuitions may contain concepts as subordinate features, but as such the concepts lose their independent nature and become indistinguishable elements in the intuition. Croce illustrates this by reference to the place of concepts in a dramatic work. "The philosophical maxims put in the mouth of a character in a tragedy or a comedy function no longer as concepts but as characteristics of the person, in the same way as the red in a painting of a face is not the concept red of the physicists but a characteristic element of the face."³ The generalities on conduct that Polonius imparts to his son, regarded by themselves, are concepts drawn from a number of experiences; but considered in relation to the complex intuition, the play as a whole, they are subordinate elements which serve merely to portray the character of Polonius.

Independent of the concept, the intuitive activity is quite indifferent to the distinction between reality and illusion which is framed by the conceptual process. It includes the imaginary

¹ This essay is based on part of a paper read to the Melbourne University Philosophica Society on October 19, 1928.

² *Estetica*, p. 4.

³ *Estetica*, p. 5.

figures of a fantasy as well as the reality that is given in sense perception. "The intuition is the undifferentiated unity of the perception of the real and of the simple image of the possible."¹

It can be said that the artistic activity is not concerned with the question of the reality of its productions, provided that by "reality" we understand something more coherent and systematic than the immediately given, for it is obvious that even the intuitions of "unreal" things must be held before the mind and seen to have determinate characters, that is, they must have the reality of appearances.

The completely-formed intuition is the real starting-point in knowledge; hence, sensation can be nothing more than an abstract limit to the intuition, in which it is resolved. Sensation is never apprehended by itself, but always as the matter of an intuition. Correspondingly, the intuition is always embodied in some kind of sensation. The relation between intuitions and sensations is illustrated by Croce's reply to an objection raised by Aliotta, which is expressed as follows: "Either all the psychical qualities which are revealed internally to the mind as concrete individuals are products of the æsthetic intuition; and then the sensations, emotions, and hallucinations, no less than the perceptions and representations, are artistic facts; which contradicts our æsthetic experience. Or, there are some psychical qualities, that is, the emotions and hallucinations, which must be excluded; and then, as such, we are given immediate knowledge of them in the moment in which they are lived, and there can be a consciousness of the individual without the æsthetic intuition, and Croce's theory is false."²

Croce avoids the contradiction simply by accepting, with some modification, the first alternative, which affirms that every psychical quality, as an individual object, must be an æsthetic intuition. But Croce adds that emotions and sensations are more than individual intuitions. "A sensation or an emotion in empirical psychology is a complex, a mixture; a chaos of intuitive, intellective and practical moments; it is intuition, intellectual reflection, impulse towards an end."³ Simply contemplated as an individual object, any emotion or sensation is an artistic fact; but in the form in which it is felt to contradict our æsthetic experience, it is already the object of our intellectual and practical activities. Similarly, the decision to call some experiences hallucinations marks the presence of the reflective distinction between reality and illusion; and the intuitive contemplative activity is no longer pure, but disturbed by extra-æsthetic interests.

¹ *Ibid.*, p. 6.

² Aliotta, *L'Estetica del Croce e la crisi dell'idealismo moderno*, p. 16.

³ *Problemi di Estetica*, p. 486.

Individual psychological qualities are artistic objects if the æsthetic contemplation is not confused; but in ordinary life, says Croce, "reflections and volitions quickly follow the sensations—but however quickly this succession occurs, it does not abolish the first instant, which must be a pure intuition. This first instant, multiplying and dilating itself, is the beginning of the life of Art. Without this small spark the large flame could not follow. Artists, in an eminent sense, are those who have the power to persist longer than other men in the moment of pure sensation or intuition, and to help others to persist there. Artists retain the ingenuous and intent gaze of the child, and are alien to and undisturbed by the preoccupations of the practical life."¹

The return to the moment of pure intuition involves the exclusion of the conceptual and volitional interests, and this alone makes possible the purely intuitive knowledge of individuals.

According to Croce, the intuition and its expression are identical. That which does not reveal itself in expression is not the intuition, but the abstract limit, blind sensation, in itself unknowable. The intuition is the immediate object in knowledge, and its expression is nothing more than its objectification in some sensuous medium. "If this proposition sounds paradoxical, one of the causes is doubtless the habit of giving a too restricted meaning to the term 'expression,' assigning it only to verbal expressions."² "Expression" must include all the *media* in which intuitions are embodied, lines and colours, as well as words and musical tones. But the principle reason for the difficulty that is felt in regard to the identification of intuition and expression is the conviction that intuitions can exist in the mind before the means are found for their adequate expression. It is possible to delude ourselves, says Croce, in believing that we have "many and important thoughts, but cannot succeed in expressing them." But if we really had them we should have them already formed in the appropriate words, and thus expressed. "If in the art of expressing them we find that these 'thoughts' seem poor and confused, it is certain that the thoughts themselves are imperfect."³ Intuition and expression are not two distinct acts. We do not first have an intuition of a poem, then express it in words: it only begins to exist when the words are found for its expression. The difference between an artist and an inartistic man is that the artist sees where the layman merely feels vaguely. Expression thus means no more than having the intuition clearly before the mind, and this is precisely its creation by the intuitive activity.

¹ *Ibid.*, p. 486.

² *Estetica*, p. 11.

³ *Ibid.*

Perhaps the most usual cause of the distinction between the intuition and the expression is that the term expression is frequently applied to the actual creation of a work of art, the writing of the poem or the painting of the picture. This process of translating the inner vision or contemplation of individual objects into an external medium, written words, lines or colour, Croce calls externalization (*estrinsecazione*) and denies that it is an artistic activity. The artistic intuition is essentially contemplation, an internal vision, and the sole function of the production of the physical "work of art" is to effect a reproduction of this inner vision by fixing it in a permanent material. The intuitive contemplation of a poem, which is one with its expression in words and rhythm, is a spiritual act, a moment of the internal life of the poet. But as soon as he begins to take steps to ensure that this vision shall not be lost, and to fix it in his memory by repeating it word by word, or by writing it down on paper, he accomplishes a purely practical act, and the poem ceases to exist until it is once more taken up into the mind of the poet and re-lived. Similarly, the intuitive contemplation of the landscape consists in seeing it, but here the vision is even more fugitive than the poem and the process of fixing or externalizing it must begin, the landscape must be painted. The purely practical work of externalization has often been regarded as itself an æsthetic activity; but it is clear that for Croce the artistic creation is the earlier process in virtue of which the poem or the landscape exists at all. Croce emphasizes the distinction between the intuition-expression and its external translation when he says: "We cannot will or not will our æsthetic intuitions; but we can decide or not to externalize them."¹

The physical work of art is no more than an aid to the memory; and the technical methods that are employed in its production are not a technique of the means of expression, but of the means of preserving expressions. Consequently, the external "work of art" has, in itself, no æsthetic significance.

The inferior position that Croce assigns to the externalizing process naturally suggests a criticism. That is, if the æsthetic contemplation is prior to and independent of the production of works of art, are these necessary at all? For it seems that the artistic activity, the creation of the intuition, can be enjoyed without the aid of the physical work of art. Even though it is admitted that the intuitions, to be permanent, must be externalized, the distinction between the expression and the externalization implies that the intuition can be apprehended before the practical externalizing process begins. Croce's

¹ *Estetica*, p. 122.

statements do permit this interpretation ; and it must be added that the creation of the external work of art, involving close observation of the individual characters of each intuition, is the very process by which we come fully to apprehend these characters. That is, we do not first have an intuition, then externalize it ; but only by externalizing do we come to see what the intuition is. This has frequently been expressed in the statement that the artist paints in order to see ; and the history of art shows that with the development of finer technical methods, the discovery of more flexible *media*, there is a correspondingly higher development of the artistic vision.

Croce is convinced that the æsthetic activity is essentially contemplation, an inner vision and not a practical activity. This leads him to deny that the external physical work of art is anything more than a stimulus. While admitting the value of the distinction, it must be added that it is no more than logical ; for in the actual artistic contemplation the intuition can only be appreciated fully in the process of externalizing it.

From the conception of art as intuition follow certain negations that illustrate the theory in greater detail. In Croce's words, the theory "denies, first of all, that Art is a physical fact, consisting, for example, of certain determinate colours or relations of colours, certain determinate forms, sounds ; certain phenomena of heat or of electricity ; in short, of whatever is called physical."¹ Such an assumption appears to underlie some forms of psychological æsthetics, which apply experimental and statistical methods to determine what kinds of shapes, lines, colours, etc., are most satisfactory æsthetically. For example, in the well-known experiments first undertaken by Fechner, rectangles of various proportions were investigated. The result shows (according to the summing-up by Lalo²) "a mitigated approbation for the square, a marked repulsion for the slightly lengthened square, some disdain for rectangles that are too long, and a majority of preferences for the relation called the golden section." The practical outcome of such investigations is the discovery of certain general propositions about the æsthetic correctness of determinate shapes, proportions, colours, etc., which play no essential rôle in the appreciation of individual works of art.

Croce's theory of art does not tend to limit æsthetic value to certain privileged relations, but insists that the æsthetic activity is one whose objects are infinite.

If we take the results of experimental inquiries and attempt to erect an æsthetic theory on them, we shall be led to conclude that there are some objects which, on account of their shape, colour, etc., are intrinsically beautiful, and others which must

¹ *Breviario di Estetica*, p. 16.

² *Esthétique*, p. 14.

be ignored because they do not conform to the general rule. Even artists have occasionally been misled to search for some general criterion of æsthetic correctness. Hogarth's "line of beauty" is well known; and Sir Joshua Reynolds, seeking the "secret" of the Old Masters, measured the proportions of space occupied by light and dark colour on their canvases. It is obvious that this sort of investigation fails to achieve more than accidental relations, which are entirely useless as rules for the production of art.

If it is admitted that the "golden section" is the correct or most satisfactory proportion for a rectangle, every other type of rectangle will be more or less ugly or unsatisfactory; and if we imagine the same method applied to colours, curves, and every other feature of objects, we shall be able to set forth with approximate correctness the necessary characters of a beautiful object, and objects will be beautiful to the extent that they resemble the ideal type. If this conclusion is not drawn, it will be difficult to see any purpose in the analysis of the proportions and colours of objects. It might be objected that the discovery of the general characteristics of beautiful objects does not necessarily restrict the quality beautiful to privileged objects, but leaves room for endless individual variation.

In this case it would then be admitted that the general characteristics are not the determining feature, and that any proportion, shape or colour may be beautiful. Croce's theory of art is fundamentally opposed to the generalizing tendency in æsthetics; for each intuition is unique, and comparable to others only in virtue of an abstraction which destroys its æsthetic character, and it implies that any object may be beautiful, that is, if it is regarded as a purely individual object.

Another negation follows from the concept of Art as intuition. Since it is a purely theoretical contemplative act, Art does not aim at attaining pleasure and avoiding pain. Pleasure may accompany or be merged in the æsthetic activity; but it is an accidental characteristic.

Here, again, psychological æsthetics tends to obscure the distinction between the artistic and the utilitarian activities. Guyau, for instance, holds that "nothing but a simple difference of degree and extent separates the beautiful from the agreeable,"¹ and speaks of the useful as a first degree of the beautiful. Lipps, who bases his æsthetic on psychological investigations, avoids confusion, and preserves the independence of æsthetics by assuming that in artistic enjoyment we experience qualitatively different pleasures.

In opposing the tendency to absorb æsthetics into psychology and to deny the strict independence of the artistic activity,

¹ *Les problèmes de l'esthétique contemporaine*, p. 84.

Croce is in agreement with Kant's description of the pleasure in beauty as "*ein Wohlgefallen ohne alles Interesse.*"¹

It should be added that it is no more than a tendency of psychological æsthetics to deny essential differences. Volkelt, while insisting that it is not possible to construct an æsthetic theory without reference to Psychology, admits that, ultimately, Æsthetics is a *Werttheoretische Wissenschaft*.

Further, Croce's theory denies that Art is a moral activity. Morality is practical, concerned with willing universal ends; but Art, as purely contemplative, cannot assist morality by praising the good and blaming the evil. It is indifferent to the distinction, and the æsthetic activity can be exercised on objects that would be condemned from a moral standpoint. The most consistent exponent of moralistic æsthetics is Tolstoy. In "What is Art?" he condemns as immoral, or indifferent to morality, the works of Beethoven, Rembrandt, and Shakespeare. Neither, says Croce, is Art an intellectual act. This negation is already implied in the primary place allotted to the intuition and the assertion of its independence of the concept. The intuitions of Art have a reality that is immediate and absolute. They do not form a system of partial views of an ultimate Reality, and are concerned solely with the appearances.

These negations which give the main features of Croce's theory of the intuition will be sufficient to serve as the basis for the discussion of a particular problem in the philosophy of Art, namely, the opposition between Realism and Idealism.

Croce's general philosophical position might be thought to decide at once for Idealism and to reject Realism. But it will be seen that Realism in Art does not imply a realistic philosophy; hence, it should be possible to reinterpret the artistic practice of Realism in such a way that it could be reconciled with Croce's idealistic philosophy. Realism in Art, as it is usually understood, means that Art consists in the imitation of Nature.

Croce himself says that this theory affords an example of the confusion of the artistic fact with the procedure of the natural sciences; and he rejects it on general grounds. Idealistic philosophy, as a rule, is in agreement with him. Lotze held that "the mere faithful imitation of Nature would indeed awaken in us the conception that even the possibility of representing something vulgar or wretched in so striking a manner presupposes at the same time an elevation above it, and also elevates the beholder above it. Still, paintings of this sort will stir us only for once by their technique and subsequently leave us coolly disposed."²

¹ *K. d. Urteilskraft*, S. 45.

² "Outlines of Æsthetics," p. 85.

From a different philosophical standpoint Herbart¹ asks whether there is anything to be gained by imitating the ugly and indifferent in Nature. In this form the objection to Realism is based on the assumption that there are ugly and indifferent objects, and conflicts with the fact that objects that are conventionally called ugly may become beautiful when they are artistically viewed. There is an obvious sense in which the portraits of Rembrandt are not always of beautiful people; but this use of the term "beautiful" is not purely æsthetic. It has been said that there can be beautiful representations of ugly objects; but it is clear that to call them beautiful representations, and not merely successful or exact, means that their is a standpoint from which the objects that are ordinarily called ugly can be beautiful.

More recently Collingwood has brought forward a criticism of the imitation principle, and it will be useful to consider his objections not only because he treats the question in detail, but because he identifies his theory with Croce's.

Collingwood holds that the concept of Art as imitation of Nature is not only a false æsthetic principle, but that its practice is actually impossible, since "Nature is so infinitely rich in detail, so infinitely subtle in her effects, that we cannot really copy her."²

If this meant no more than that no number of works of art could represent all the varying aspects of Nature, it would not be a valid objection to realistic art; but it evidently means that imitation of Nature is impossible even in individual works of art, and that there could not be an exact portrait or a perfect still-life.

To examine this criticism it will be necessary to consider the actual process of painting in some detail.

Collingwood's criticism means that if you take any simple object, say, a tree, you will never be able to copy it because the detail is endless. But in what way do we come to perceive this infinite detail? If we regard any object from a determinate point, it appears as a relatively simple complex of colours and shapes. A tree trunk, for example, from a point about one hundred yards distant, will be seen as two or three shades of colour, with most of the detail eliminated. For the spectator situated at this point the tree consists of these few colours and shapes. By continually moving closer and by turning the attention to isolated parts of the tree, we should be able to perceive new aspects and further detail that was at first invisible. Nature is infinitely varied in the sense that we can always see more detail if we search for it.

¹ *Lehrbuch der Einleitung*, etc., p. 177.

² "Philosophy of Art," p. 75.

The movement towards the object and the successive discovery of richer variety gives us an unlimited number of views of the object, which could be defined as the totality of all possible views of it. But the "Nature" that is imitated in realistic painting is not the "real object" that is constructed from the infinitely varied aspects seen from an unlimited number of viewpoints; in the case of each work of art it is one of these aspects only, *i.e.*, the picture represents the object as viewed from one determinate position.

A painter is bound, by the very conditions of seeing and representing Nature, to adopt one determinate viewpoint and to depict one aspect of the object. He cannot, as in ordinary perception, form a conception of the "real object" from different points by moving closer to it or by examining parts of it more intently. The altered viewpoint does not add further detail while keeping intact the appearance of the object from the former viewpoint, but changes it entirely.

Let us imagine a painter copying the tree trunk. It will be a simple matter to imitate exactly the appearance of it at a hundred yards, and the picture will show a few simple patches of colour. Moving closer to the tree, the painter will see the detailed formation of the bark, etc., and it might be thought that the picture could be perfected by adding this new detail. But the new viewpoint does not merely add additional shapes; it changes the whole aspect of the general appearance of the tree. The few simple colours themselves will have disappeared and the tree will appear darker. Similarly all the shapes will be altered.

The necessary adoption of one aspect of an object has the effect of making the picture of it appear incomplete and simplified. The very process of perception involves a passage from what is immediately given, the appearance, to the object which is constructed with the aid of non-sensational elements. Speaking of perception, Russell observes that "In learning to draw, it is necessary to acquire the art of representing things according to the sensation, not according to the perception."¹

Ordinary perception is not content to observe the immediately given appearance of an object from one viewpoint, but passes immediately to complete the perception by filling in the detail by means of reflection and closer scrutiny. Consequently, it is not surprising to find that an exact representation of the real appearance of an object is frequently regarded as an idealization or simplification of Nature. Collingwood, in insisting that it is impossible to imitate Nature because the amount of detail is endless, takes his stand on the conception of an object that is formed by reflection. The

¹ "Analysis of Mind," p. 81.

object that the painter attempts to imitate is much simpler than this, and his task is not impossible because he is bound to look at one aspect. The only sense in which it is impossible to represent Nature in all her endless variety is that there cannot be an infinite number of pictures.

Concluding that imitation is impossible, Collingwood proceeds to find some other principle. If we cannot copy the infinite detail, we must select from it; and the question arises: How shall we select? He replies that "we must alter Nature by reference to Nature. We must select; and selecting is idealizing, for the omission of some part of the object is not the mere omission of a part, but alteration of the whole."¹

Alteration of Nature by reference to other parts cannot be the solution, because Collingwood's theory implies that every part of Nature is infinitely varied and hence impossible to imitate. "The criterion of idealization,"² he concludes, "must be found in a purely ideal Nature. What we are to depict, then, is a typical or generalized Nature which is nowhere actual; and we alter the particular objects which we are ostensibly copying so as to bring them nearer to conformity with this norm or type." The generalized Nature is not found by a process of abstraction from a number of particular instances, for it is nowhere actual. It is, in Collingwood's words, "an ideal of the imagination, created by itself for its own guidance; a law laid down wholly *a priori*, and independently of all experience of the natural world, by the pure act of the æsthetic spirit."³ The defect of this solution lies in the introduction of a radical separation of the ideal from the real, that is quite foreign to Croce's doctrine, which rejects, together with the imitation of external Nature, the imitation of the ideal. For, as Croce says, "in both cases reality is considered external and transcendent, and the æsthetic faculty reduced to a passive reception."⁴

Further, the "generalized Nature" is entirely useless as a criterion for the guidance of Art, which aims always at the individual. Where, for example, could we find the "typical" landscape? The principal reason for Croce's rejection of the imitation of Nature as an æsthetic theory is its association with a naturalistic or positivistic philosophy, which conceives the external world as an independently existing reality and reduces mind to a passive spectator of a reality which it does not create.

The theory of art as intuition identifies the æsthetic contemplation with the construction of the artistic object, and is consequently opposed to the conception of an external reality. Hence, if it is to be reconciled with Croce's æsthetic

¹ "Philosophy of Art," p. 75.

² *Ibid.*

³ *Ibid.*, p. 76.

⁴ *Nuovi Saggi di Estetica*, p. 147.

theory, the imitation of Nature must be given a new meaning. It can mean no more than the process of externalization. We have seen that this is the means by which the intuitions can be preserved in a fixed and permanent medium. If the externalization of the intuitions is to serve its purpose, the physical work of art so produced must reproduce exactly every feature of the intuition, omitting nothing and adding nothing; for its function is to take the place of the intuition which never recurs.

For Croce, the true æsthetic activity is the creation of the object, the first stage in the knowledge of external reality; and it is clear that if the æsthetic act were made to consist in the imitation of this "external reality," that is, the product of the intuitive activity, art would be the imitation of the æsthetic act and this would, as Croce says, be an entirely superfluous duplication.

But while admitting, with Croce, that the artistic act is essentially contemplation, that the intuition-expression is the individual object, it is permissible to add that the imitation of Nature is not incompatible with this view, for as it is involved in the process of externalizing the intuitions, it means no more than the preservation of all the features of the intuition.

Though it is not correct to say that art consists in the imitation of Nature (for Croce insists that there is not a "given" external reality), the close relation already established between the intuition and its externalization, the seeing and the depicting show that the imitation of Nature, understood as the externalizing of the intuition, is necessary for the full appreciation of the intuition.

Art is intuition; but since we cannot have our intuitions completely before our minds without carefully examining them "with the eye of the painter," intuition involves externalization; and if this externalization is an exact copy of the intuition, we shall be able to return to the particular intuition at will. The imitation of Nature, understood as externalization, does not require to be supported by a naturalistic philosophy and does not presuppose an independently existing external world; but the popular form of idealism in Art, that is generally opposed to it, does.

Every one is familiar with the traditional opposition between realism and imaginative art. According to the latter, Nature is either ugly or indifferent; and the creation of Beauty consists in idealizing or correcting Nature. Even Whistler, who in most of his work showed himself to be a follower of Velazquez, was inclined to accept the theory. Here, once more, the starting-point is the world of real objects that is known in perception, the world is represented as external to the æsthetic creation. But so long as an opposition is conceived

between realistic imitation and imaginative selection, imagination is represented in a purely empirical fashion, while the imagination that Croce identifies with intuition is the activity which produces the external world at the primary level. There is not first a natural object, as it is conceived in perception, which might become an æsthetic object by a process of selection or idealization. The æsthetic intuition is the first stage in the construction of the object, which is subsequently elaborated into the real object of perception. In consequence of the empirical conception of imagination, which makes idealization consist in no more than an elaboration of the given, there is a corresponding empirical distinction between natural beauty and the beauty of art.

From the view that the physical work of art is merely the means by which we are able continually to return to any intuition, to re-establish contact with the æsthetic world, it follows that there cannot be two kinds of beauty, natural and artistic. The contemplation of Nature and works of art are one and the same activity, for the work of art is not an object but the externalization of an intuition. In contemplating it we forget that it is a physical thing and, through it, look directly at Nature.

The division of beauty into natural and artistic is often associated with the view that beauty is a quality of some objects and not of others. Guyau, for example, discusses the question whether the influence of modern industry will be prejudicial to Art, since it renders obsolete many beautiful objects like sailing ships; but concludes that even machines, under certain circumstances, can be beautiful.

Croce speaks of natural beauties as though they could be regarded as works of art or externalizations. "It is evident that, besides the instruments made to reproduce images, there can also be found objects already existing, produced or not by man, which fulfil the same function, that is, are more or less adapted to fix the memory of our intuitions; and these things receive the name 'natural beauties.'" It might be thought that Croce adopts the distinction; but he goes on to say that these natural beauties "exercise their power solely when we know how to apprehend them in the same state of mind as the artist," and concludes that "the always imperfect adaptability and the fleeting character of the natural beauties justify the inferior place assigned to them with respect to the beauties produced by Art."¹

The distinction here is only apparent, for it means no more than that natural objects, however permanent they are, must be looked at "with the eye of the artist"; and as we have seen

¹ *Breviario*, p. 51.

from the close connection of externalization with contemplation, this is inseparable from the process of reproducing them in works of art.

The only meaning that we can give to the term "natural beauty" is that all beauty is of Nature. The work of art, in itself, has no beauty, but derives it from Nature, of which it is a copy. The externalization, as a physical thing, must not obtrude with any features of its own, but must be perfectly transparent; and the beauty of Nature must first reveal itself in the work of art.

Since the physical work of art, in Croce's doctrine, is merely an "aid to the memory," it follows that in looking at a picture we should not be aware of it as an object, but should look through it at Nature.

Volkelt, in opposition to this view, holds that in the contemplation of a picture there is an essential accompanying awareness of it as a work of art. Sometimes this awareness may be sufficiently distinct to refer the work to a particular artist; but in any case, according to Volkelt, it will be present to some extent, indicating a distinction between the æsthetic attitude to natural beauty and to Art.

"A tree (in a picture) looks like a painted thing, not like something which has grown by itself. . . . Only if the spectator were at the level of a very young child could a picture appear to him as though it had nothing to do with an artist."¹

Naturally, perfect transparency could be attained only by a perfect work of art; but the awareness of the picture and of its creation by a particular artist do not belong to the æsthetic act as such, but are introduced by reflective thought about the work.

It is obvious, to reflection, that a tree is more than its representation in a picture. As a living thing, it has a past history. But the æsthetic contemplation can afford to ignore all reflection about the reality of the object.

The two attitudes indicated in Volkelt's distinction of the tree as a "painted thing" from the real tree that "has grown by itself" do not represent two ways of regarding beauty; but spring from the opposition between the purely æsthetic activity, which contemplates the immediate appearances that are depicted in painting, and reflective thought, which passes beyond them to form the conception of a real object as it is known in perception.

If, in a picture, the tree looks like a painted thing, the work is not fully transparent, and the æsthetic contemplation is disturbed because the externalization does not perfectly fulfil

¹ *Das Ästhetische Bewusstsein*, p. 173-4.

its function. A picture is imperfect to the extent that it draws attention to itself and fails to put us into immediate contact with Nature. Correspondingly, when in contemplating Nature, the tree is felt to be more than the image or immediate appearance that is the object in painting, when it is regarded as something which has grown by itself, Nature is no longer contemplated with the eye of the painter, and the æsthetic attitude is disturbed by the intrusion of reflective thought.

Although he is convinced that the æsthetic attitude brings with it "a lowering of the feeling of reality," substituting for the "everyday materiality" a "lighter and more ideal" reality, Volkelt, in some of his observations, is unable to free himself from the reflective conception of a real object. Speaking of the full-size reproduction of objects in Art, he observes that "the rendering of actual size in paintings, etchings and drawings is customary only so far as portraits are concerned. Flowers and the objects in paintings of still-life may also be given in their natural size. But it is not possible to represent in their real size, houses, mountains, streams, trees, clouds, and even groups of figures. Sculpture has more scope for life-size renderings."¹ It is strange to find that this opinion is by no means uncommon. In an obvious sense, a landscape painting is smaller than the real trees, houses, etc., in the actual landscape; but from the standpoint adopted by the painter, whence he can see his object as a whole, the apparent sizes of the trees, with which he is alone concerned, and the patches of colour he uses to represent these appearances, will be no more than a few inches in size. In painting a landscape the painter includes on his canvas just the amount of it that appears the same size as his canvas. That is, he represents it the size it would appear on his canvas if this were both opaque and transparent, as if in looking through the canvas he should see the landscape on its surface. In this way it is possible to represent what for the painter is the real size of a tree. Thus not only is "reduction" unnecessary, but when, as frequently occurs, it is practised, the result is a falsification of the appearance of things. If a painter includes on his canvas more than what is actually covered by it, and represents a greater number of features of the landscape, that is, includes more detail than could be seen from one viewpoint, the reduction that is involved in this procedure does not merely make the objects appear more distant, for at a greater distance the system of colours and tones, as well as the sizes, would be entirely different; but presents the objects as though they were much smaller than real trees and houses. Instead of a rendering of the apparent size of the real objects in the landscape, we should have a picture of minute trees and houses, and this representation would differ essentially, in

¹ *Op. cit.*, p. 202.

æsthetic significance, from the landscape itself. In reducing the apparent sizes themselves, a painter would crowd on to his canvas more detail than was compatible with the tones and colours of the objects seen from the position he had adopted, and this means that without actually changing his position in space, but by isolating detailed parts of the landscape and combining them in one picture, he would be adopting more than one viewpoint, and we have seen that this is contrary to the correct manner of contemplating the object. For ordinary perception a representation of an object is sufficient if it gives the relative sizes, if the objects are, as it is said, "drawn in proportion"; but from a more rigorous standpoint it is immediately apparent that this is not sufficient, and that an alteration of the forms requires a corresponding alteration of the colours and tones, that is, demands the adoption of one viewpoint from which the forms will be naturally in agreement with the colours and tones. The very conditions of seeing the object from one viewpoint render reduction unnecessary, for if the spectator were to stand so close to the object that its size appeared too great for a canvas, he would not be able to see it in the single glance with which the painter contemplates a landscape, but would be obliged to look at it bit by bit, and as far as the possible representation of it is concerned, he would not see one picture, but several. A landscape is represented in its actual size in as literal a sense as a portrait is life-size. The belief that the representation of the former must be a reduction is still one more consequence of the ordinary view of a "real object."

Croce's denial of intrinsic æsthetic significance to the physical work of art means the rejection of the distinction between natural and artistic beauty. As a means for the recreation of the intuitive image, the picture must be forgotten in the act of contemplation. Through it we regard the beauty of Nature. Similarly, the view that natural beauties are to be regarded as inferior externalizations which, to achieve their effect, must be regarded "with the eye of the artist," implies that only through the work of art is this natural beauty revealed. Taken together, these two proportions are not contradictory, but point out that the beauty of Nature and artistic beauty are one. Their identification is the logical result of Croce's conception of the work of art as a mere externalization, and although this conclusion is not definitely drawn by Croce, it is one of the most valuable implications of his theory.

The rejection of natural beauty and the beauty of physical works of art is not a simple denial that "objects" are not in themselves beautiful and an assertion that beauty is somehow subjective. Croce's theory is essentially a reinterpretation of the status of the object. He denies that it exists independently

of the mind. All that exists at the intuitive level is the individual image; this is in itself beautiful, that is, beauty is objective in this sense. It belongs to all truly individual images, *i.e.*, is not a subjective addition. Croce's opposition to the imitation theory springs from his conviction that it implies the identification of Art and Science. Zola's opinions on the aim of literature provide a good example. If the view that Art imitates Nature meant only that Art presented us with exact imitations of natural objects, to which we should react in the same way as we do in everyday life, it would be false. The objects that Art offers are, as Volkelt says, "of a more ideal kind than the ordinary reality." There is a sense in which Art selects, that is, it is content to remain at the level of pure intuition; but this selection does not involve, as is usually thought, an alteration or idealization of what is immediately given. It is a selection simply because it is a more faithful rendering of the real appearance of things than the "natural objects" of ordinary perception; and since in Croce's theory the work of art is a substitute for the fleeting image of reality, the intuition, it must be an exact copy of the intuition, and to that extent only, an imitation of Nature.

Bergson shows how the terms idealism and realism must be carefully interpreted in considering the problems of Art. Art, he says, "has no other object than to remove the practically useful symbols, the generalities conventionally and socially accepted, in short, all that hides reality from us, in order to put us face to face with reality itself. There is a misunderstanding on this point which is born of the dispute between realism and idealism in Art. Art is certainly nothing but a more direct vision of reality; but that purity of perception implies a break with useful convention, an innate disinterestedness specially localized in the senses or the consciousness, in short, a certain immateriality of life which is what has always been called idealism. So that it is possible to say . . . that the realism is in the work when the idealism is in the soul, and that it is thanks to ideality alone that contact is established with reality."¹

The "innate disinterestedness" in Croce's theory is simply the view that Art is a purely contemplative activity, concerned solely with the immediate intuitions, indifferent to the logical and practical activities that are based on them.

In dealing with the implications of Croce's æsthetic, it is important to avoid the hasty oppositions of realism and idealism that are so prominent in the philosophy of Art. Croce's theory has frequently been used to justify developments of art that are diametrically opposed to realism. Speaking of the

¹ *Le Rire*, p. 160.

effect of his æsthetic, Croce observes that his theory was often given a distorted application and that the æsthetic doctrines "which were thought out to explain the poetry of Dante and Shakespeare and the painting of Raphael and Rembrandt were distorted according to modernistic formulas of the schools, in order to justify the most confused romanticism and futurism."¹

By reinterpreting the imitation of Nature as the procedure of externalizing the intuition, it is possible to explain realistic painting in terms of Croce's idealistic æsthetics; but there is a traditional distinction between the imitative arts (sculpture and painting) and the non-imitative (architecture and music), which might suggest that the latter require essentially different treatment.

Discussing imitation in Art, Herbart asks: "What can be imitated by Music, which finds no model in Nature, and which always loses some of its dignity when it undertakes to paint?"²

It is true that with the possible exception of the worst developments of so-called "program-music" with its descriptive *Tongemälde*, music does not attempt to imitate external Nature.

But if we remember that even in the typical imitative art, painting, the imitation serves merely as an aid to the memory, and that the only purely æsthetic art is the original creation of the intuition, we shall see that the distinction between imitative and non-imitative arts refers merely to a necessary difference in the procedure of externalization, upon which it would be a mistake to base any distinction affecting the conception of the artistic activity itself.

In painting, the externalization is an exact copy of all the features of the intuitive image. However, if it were possible to devise a system of symbols which would be capable of serving as an adequate stimulus to the reproduction of the intuition, we could replace the imitation or externalization by something resembling a musical score. Each of the supposed symbols would stimulate the mind to recreate a specific colour or a definite form. In this event we should no longer call painting an imitative art, and it would be easier to understand that the picture is merely an aid to the memory. But no system of symbols, however complicated, could ever represent, with the required accuracy, all the varied forms and colours of the original intuition; hence, the painting must be an exact copy. In music, which gives a definite value to all its symbols, which are simply directions for the production of the required sounds, the written score serves exactly the same purpose as the painted picture.

¹ *Storia d'Italia*, p. 256.

² *Lehrbuch*, p. 178.

As in painting the æsthetic act consists in the production of an individual image, the intuition, so in music the æsthetic act is the inner hearing which first creates the symphony ; and just as the intuition in painting is reproduced from the stimulus given by the physical work of art, in music the intuition is recreated whenever the musician reads over and hears the symphony, or plays it on the appropriate instruments. If musical tones were permanent things (to take a fantastic example) which could be spread out like paint and preserved like a picture, we could imagine that the externalization of a piece of music would be an exact imitation of the inner hearing, copying all its features in precisely the same way as a painting copies the inner seeing, the intuitive image. Music, then, would be called an imitative art. Thus the distinction between imitative and non-imitative arts does not refer to an essential difference between them as arts, but solely to the different methods required in the process of externalization. Ultimately, as Croce remarks, no art is imitative, that is so far as its essential nature is concerned, for "an external world, apart from or above the mind, exists neither for the artist nor for man in any of his activities ; sentiments and volitions, representations and thoughts, alone exist, and this is reality itself."¹ That is, Croce denies that Art imitates Nature simply because Nature as an independent object does not exist. Nevertheless, it exists in some sense, and in accordance with this, we can say that painting is not the imitation of an external and independently existing world, but the externalization of the internal world of representations, images or intuitions which are pure creations of the æsthetic spirit. Since this externalization can only serve its purpose if it is a reproduction or copy of the representation, it is natural that the imitation involved in this procedure should be taken by the realistic philosophy of Art as a definition of the æsthetic activity.

Imitation is contrasted with creation in the traditional opposition of realism and idealism in Art. In Croce's theory they can be made to agree, for the true æsthetic act, the intuition which is inseparable from its expression, is a pure creation ; its externalization, which is a practical activity, is imitation.

¹ *Nuovi Saggi*, p. 147.

PARTICIPATION.¹

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I.

IN the *Phædo*, to prove the immortality of the soul, Socrates distinguishes two realms, the visible and the intelligible. On the perception of objects in the former, the mind is led to recall *forms* or *ideas* in the latter. *Participation* seems to be introduced primarily to explain the relation between these two realms, between thing and idea. Things *participate* in ideas. The relation between them is one of *participation*, *presence* or *communication*.

You remember, Cebes suggests that Socrates' favourite doctrine of *recollection* would prove the prenatal existence of the soul. Simmias wants proofs of this doctrine of recollection. Cebes summarizes the *Meno* argument. Socrates argues that, seeing knowledge is of a certain nature, we are justified in describing it as recollection. Knowledge arises when on *perceiving* something we *form a conception* of something else, which is the subject not of perception but of another kind of knowledge. Seeing that knowledge is of this nature, surely we are justified in calling it recollection. "A person who, having seen or heard or in any way perceived anything, knows not only that, but has a conception of something else, which is the subject not of the same but of some other kind of knowledge, may be fairly said to recollect that of which he has the conception."²

That knowledge *is* of this nature, he demonstrates in this way. If we take two material things which we normally regard as equal, we find that at one time or from one point of view they appear equal, at another time or from another point of view unequal. That is to say, we see that they are not absolutely equal, and realize that we can call them equal only because, independently of them, we know what we mean by equality, because we know the idea of absolute equality. Yet we only arrive at this idea through the perception of these so-called equals. Now this is just what Socrates was saying. On perceiving two equal things, we are led to form the conception of absolute equality, which cannot be perceived, but only arrived at by thought.

It should be noted that the doctrine of recollection is not used to prove the existence of the idea of equality, but the idea

¹ Paper read to the Melbourne University Philosophical Society, June 7, 1927.

² *Phædo*, 73. (All quotations from Dialogues according to Jowett's translation, Stephanus' paging.)

of equality is introduced in order to explain or make intelligible our perception of equal things, and the doctrine of recollection to account for our knowledge of the idea of equality which our perception of equal material things compelled us to postulate. This, of course, applies to ideas in general.

The significance of the doctrine of recollection is brought out in the next development of the argument. He distinguishes between two kinds of existences : (1) The invisible or intelligible existences, *i.e.*, ideas, forms or essences ; and (2) visible existences, *i.e.*, material things. The former are unchanging, immortal, eternal ; the latter changing, mortal, fleeting. Now the body is akin to the visible, the soul to the invisible realm. This, then, is the significance of the doctrine of recollection. The soul thinks the essences or true reality of things only because she is akin to them, is herself of the same nature.

This appears to be the culmination of Socrates' argument. But actually it is not. The distinction of two kinds of existences, though it would explain why the soul can think the ideas, as it stands would make altogether unintelligible how things of sense could suggest or call to mind ideas—and so would, as a matter of fact, really make the ideas themselves unintelligible. The doctrine of recollection explains one side only of the nature of knowing, *viz.*, that to know is to think an idea. To explain the other side, namely, that the idea is suggested to the mind by the perception of a sensible object, it is necessary to exhibit the relation between what so far we can only regard as these two different realms.

While they are regarded as two realms, it is possible to regard the invisible or intellectual realm as a mere adjunct or epiphenomenon of the visible, as Simmias does, or to regard the laws of the visible world as valid for the invisible, as Cebes does. In order to bring out the relation between the two realms with the greatest dramatic effect, Plato completes the argument as a reply to these objections, more particularly to that of Cebes. Cebes contended that just as a weaver during his life wears out several coats, but finally exhausts his energy and leaves behind his last coat, so the soul, though it wears out several bodies, may at last exhaust its energy, and, on the death of its last body, itself perish.

This objection, as Socrates points out, raises the whole question of the nature of generation, or the *cause* or *reason why* of things. Cebes' contention is that a natural law which he believes he finds operative in the material or visible world is also valid for the soul and the intelligible world. Socrates' reply, in effect, is that this law, far from being applicable to the invisible realm also, does not afford an intelligible explanation of visible phenomena. Instead the only intelligible explanation of the visible is—the intelligible realm. Socrates explains

that in his youth he was eager to find the causes of things. By *cause* he means not an antecedent event on which a consequent event invariably follows, but the reason why, why a thing is, why it is such as it is, why it is created and destroyed. The explanation offered by the current natural sciences in terms of the hot and the cold, the moist and the dry, eating and drinking, etc., failed to satisfy him. These so-called principles were neither intelligible in themselves nor did they make the phenomena they were introduced to explain any more intelligible. On reflection he found the current explanation of such conceptions as like, greater and less, one and two equally unintelligible.

"There was a time when I thought that I understood the meaning of greater and less pretty well ; and when I saw a great man standing by a little one, I fancied that one was taller than the other by a head ; or one horse would appear to be greater than another horse ; and still more clearly did I seem to perceive that ten is two more than eight, and that two cubits are more than one, because two is the double of one.

"And what is now your notion of such matters ? said Cebes.

"I should be far enough from imagining, he replied, that I knew the cause of any of them, by heaven I should ; for I cannot satisfy myself that when one is added to one, the one to which the addition is made becomes two, or that the two units added together make two by reason of addition. I cannot understand how, when separated from the other, each of them was one and not two, and now, when they are brought together, the mere juxtaposition or meeting of them should be the cause of their becoming two : neither can I understand how the division of one is the way to make two ; for then a different cause would produce the same effect—as in the former instance the addition and juxtaposition of one to one was the cause of two, in this the separation and subtraction of one from the other would be the cause. Nor am I any longer satisfied that I understand the reason why one or anything else is either generated or destroyed or is at all, but I have in my mind some confused notion of a new method, and can never admit the other."¹

In other words, Socrates contends that the whole current scientific conception of "cause" (or the reason why) proves on examination to be ultimately unintelligible. The whole current conception of scientific explanation, if treated as ultimate, rested on a misconception of the nature of rationality, reason and thought.

Then he heard some one reading from a book of Anaxagoras, that "mind is the disposer of all," and thought he had at last arrived at an adequate conception of the reason why or "cause" of things. "I said to myself—If mind is the disposer, mind will dispose all for the best, and put each particular in the best place ; and I argued that if anyone desired to find out the cause of the generation or destruction or existence of anything, he must find out what state of being, or doing, or suffering was best for that thing. . . . For I could not imagine that when he spoke of mind as a disposer of them,

¹ Phædo, 96-7.

he would give any other account of their being as they are, except that this was best.”¹ That is to say, Socrates expected Anaxagoras to “explain” things by exhibiting the necessary contribution of each towards the rationally organized whole. Such an explanation constitutes Socrates’ conception of the “cause” of anything.

But Anaxagoras did not proceed to explain things in this ultimate way, and he himself has been unable to do so; hence, he has been forced, he says,² to adopt a second-best and hypothetical mode of inquiry into the cause, or, as we should say, of explaining things. The second-best mode of explanation turns out to be the Doctrine of Participation. Hence, ostensibly, this doctrine is introduced, not as an ultimate, but as a second-best and hypothetical manner of explaining the nature and being of everything. The method is hypothetical because it starts, not from a first or ultimate principle (namely, from a conception of “what is best”), but from the assumption of a number of principles. Using this method, we have to make the same assumption which we were led to make in order to explain the nature of our perception of equal things; we have to assume the existence of the Ideas or Forms—of an absolute beauty, and goodness, and greatness, and the like.

The doctrine of participation, for the first time, explains why, for instance, the idea of absolute equality serves to explain the facts relative to our perception of equal things, and so obviously is essential to complete the argument as expressed before Cebes’ objection is introduced. According to this doctrine, “if there be anything beautiful other than absolute beauty should there be such, that it can be beautiful only in so far as it partakes of absolute beauty—and I say the same of everything. . . . If a person says to me that the bloom of colour, or form, or any such thing is a source of beauty, I leave all that, which is only confusing me, and simply and singly, and perhaps foolishly, hold and am assured in my own mind that nothing makes a thing beautiful but *the presence and participation of beauty* in whatever way or manner obtained; for as to the manner I am uncertain, but I stoutly contend that by beauty all beautiful things become beautiful.”³ Participation in absolute beauty, then, constitutes the cause, the reason why, or explanation of the beauty of any beautiful object; constitutes the justification of, and makes intelligible, our assertion that the object is beautiful. And the same, of course, applies to any other object and any other idea, form or essence.

¹ Phædo, 97-8.

² Actually, as the Republic shows, Plato realizes that this so-called second-best method is the only way in which we can, as a matter of fact, pursue the best method.

³ Phædo, 100.

So far, and firstly, then, we might say that participation expresses that relation between a thing and an idea in virtue of which the idea (or quality corresponding to it) can be predicated of that thing, and in virtue of which this predication is intelligible. In this sphere we might speak of participation as the real basis of predication or intelligibility.

Secondly, the same conception of participation is used to explain those other conceptions which Socrates found unintelligible. He says :

“ Then if a person were to remark that A is taller by a head than B, and B less by a head than A, you would refuse to admit his statement, and would stoutly contend that what you mean is only that the greater is greater only by, and by reason of, greatness, and the less is less only by, and by reason of, smallness ; and thus you would avoid the danger of saying that the greater is greater and the less less by the measure of the head, which is the same in both, and would also avoid the monstrous absurdity of supposing that the greater man is greater by reason of the head, which is small. You would be afraid to draw such an inference.

“ In like manner you would be afraid to say that ten exceeded eight by, and by reason of, two ; but you would say by, and by reason of, number ; or you would say that two cubits exceed one cubit not by a half, but by magnitude—for there is the same liability to error in all these cases.

“ Again, would you not be cautious of affirming that the addition of one to one, or the division of one, is the cause of two ? And you would loudly asseverate that you know of no way in which anything comes into existence except by participation in its own proper essence, and consequently, as far as you know, the only cause of two is the participation in duality—this is the way in which to make two, and the participation in one is the way to make one.”¹

Participation, then, is not confined to the relation between sensible things and Forms, but is likewise used to express the relation between two Forms. Hence, we may now say in general that participation expresses that relation between anything (whether sensible thing or Form) and any Form, in virtue of which the one (or a quality corresponding to it) may be predicated of the other, and in virtue of which this predication is intelligible. In other words, participation is Plato's term for that rational organization of the real in virtue of which thought is possible.

As the term itself suggests, participation does not mean absolute identity ; the thing or idea which participates in any idea is not simply identical with that idea. You remember he stresses the fact that material equals, though they suggest or call to mind the idea of equality, nevertheless differ from that idea. Likewise three is odd because it partakes of oddness, but *is* not oddness ; snow is cold because it partakes of coldness, but *is* not coldness. Hence the term “ participation ” is also meant to express the fact that the relation between anything and anything else in virtue of which one can be predicated of

¹ Phædo, 101.

the other is not one of absolute identity. An intelligible assertion cannot take the form $A = A$.

There is, however, one element in the relation between sensible things and ideas which, as far as material things are concerned, is essential, but which the word participation does not itself suggest. Sensible things also "aim at" the ideas in which they participate. For instance, "All sensible things aim at an absolute equality of which they fall short." That is to say, the idea is an ideal which is not fully realized in the actual. Nevertheless, the actual is intelligible only in the light of the ideal; the cause or reason why of sensible things is to be found only in the idea of which it inevitably falls short.

Consequently, the doctrine of participation implies what we might speak of as two degrees of reality—ideas and sensible things which aim at, but fall short of these. The more elaborate scheme of the Republic is only a natural logical development of this implication. Before tracing this development, however, we must pause to consider what one might call the subjective aspect of rationality.

Our result so far is this: participation stands for that character of that which is known in virtue of which it is intelligible or knowable. It is that which, from the objective side, makes knowledge possible, the objective condition of knowledge. But the possibility of knowledge is also dependent upon subjective conditions, or, in other words, presupposes that the knower is of a certain nature. Intelligibility depends not only on the known, but also on the knower. No character in the object could render it intelligible if there were no intelligent beings. To set out the nature of participation, you must exhibit the nature of intelligibility; you cannot do this without considering intelligence or reason. Hence, it is impossible to give a complete account of participation without considering the factors which condition knowledge from the side of the knower. In point of fact, as we have already noted, Plato's doctrine of recollection covers both aspects of the question. In terms of this doctrine he sets out both the nature of the object which can be known and likewise the nature of the knower in virtue of which he can know it. It is with the latter aspect that we are now concerned.

In the mythical terms of the recollection theory, the soul is able to know the Forms because it had experience of them before birth, and the knowledge there gained is called to mind by the sight of sensible copies of them. In the course of the argument in the *Phædo*, this is developed into the assertion that the soul is *akin* to the Forms. Distinguishing two kinds of existences, the visible and the invisible, he asks to which class the soul is more nearly alike and akin, and replies that "the soul is in the very likeness of the divine, and immortal,

and intellectual, and uniform, and indissoluble, and unchangeable.”¹ In other words, the soul can have knowledge only because it is essentially of the same nature as the ideas. Were it not of this nature it could not think, and were it unable to think it would not be a soul. A soul is a soul only in that it thinks, reasons, knows. It can think, or, in other words, is a soul, only because it is akin to, like, essentially of the same nature as, the ideas. Compare, for instance, the *Phædrus*: “The soul which has never seen truth will not pass into the human form. For a man must have intelligence of universals, and be able to proceed from the many particulars of sense to one conception of reason—this is the recollection of those things which our soul once saw while following God, when regardless of that which we now call being, she raised her head up towards the true being.”²

But this is only half the truth. Though the soul is essentially divine, she is not actually so, except in so far as she realizes her true nature. And she realizes her true nature only in so far as she appropriates or realizes the ideal. The doctrine of recollection serves to express this aspect, too. The soul has learned all things; but at birth she forgot them, and can recover her knowledge only by strenuous effort. *Cf. Meno*: “For as all nature is akin, and the soul has learned all things, there is no difficulty in her eliciting, or as men say learning, out of a single recollection all the rest, if a man is strenuous and does not faint.”³

From this point of view, however, Plato’s conception of the relation of the soul to the real is expressed more fully and lucidly in the *Phædrus* and *Symposium* in terms of Love. Love is neither mortal nor immortal, but intermediate between the divine and the mortal, and interprets between Gods and men. Son of Plenty and Poverty, he shares the characteristics of both; he is not beautiful, wise or divine, but aspires to and seeks after beauty, wisdom and divinity. In other words, he is a philosopher, neither ignorant (for the ignorant are self-satisfied and feel no want of wisdom) nor wise (for the wise do not seek the wisdom they already have), but a lover of wisdom.

We see, then, that the relation between the soul and Being runs exactly parallel to that between sensible things and Being. Sensible things, we found, aim at and participate in, but fall short of Being. In the same way, the soul aspires towards and is akin to, but falls short of Being. Again, participation is introduced to give the cause or reason why of things—in other words, to explain them. Likewise its kinship with Being

¹ *Phædo*, 80.

² *Phædrus*, 249.

³ *Meno*, 81.

explains the nature of the soul—its aspiration towards the ideal or love of beauty and wisdom. In two places at least Plato seems to speak of this relation between the soul and Being as *participation*. In the Republic he says, "Do not these qualities (justice, temperance, etc.), which we have been enumerating, go together, and are they not, in a manner, necessary to a soul which is to have a full and perfect participation of Being."¹ In the Phædrus, he says, "He who loves the beautiful is called a lover because he partakes of it."² But whether or not we use the term participation in regard to it, this relation between the soul and Being conditions, from the subjective side, that intelligibility of the object which the doctrine of participation was introduced to explain. A thing is intelligible not merely because it partakes of an idea, but equally because a reasoning mind is so constituted that it can think it in terms of this idea. In other words, the term *idea* is not fully specified until we recognize that it is a universal which the mind thinks by a power of her own; participation is not fully specified until we recognize that it is the thinking of something in terms of such an idea. On the other hand, we can describe the nature of reason only by means of the ideas in terms of which we think. That is to say, reason and rationality, thought and intelligibility are only different aspects of the same thing. (We might say, too, that Love is a third aspect of it.) All these factors are taken up and accounted for, and for the first time become fully intelligible, in the Idea of Good.

Socrates' aim, in that section of the Republic in which this conception is introduced, is to set forth the nature of the philosopher. To do so, it is necessary to distinguish between the lover of wisdom, who recognizes the existence of absolute beauty and is able to distinguish the idea from the objects which participate in the idea, from the lover of sights and sounds, who is incapable of seeing or loving absolute beauty. The latter turns out to be a lover of opinion. Knowledge corresponds to being, ignorance to not-being, opinion to that which is intermediate between being and not-being and partakes equally of the nature of both. Now beautiful things, or the many beautiful, are from one point of view beautiful, from another ugly. The same is true of all other characters which we ascribe to the many. Hence the many partake of being and not-being, and consequently the lover of the many is a lover, not of wisdom, but of opinion. Those who see the absolute and eternal and immutable, on the other hand, may be said to know. Lovers of such knowledge are philosophers.

¹ Republic, 486.

² Phædrus, 249.

But this is not yet an adequate account of the philosopher. So far we have not passed beyond what, in the *Phædo*, Socrates calls the second-best mode of inquiry ; so far we have ignored his ideal mode of explanation—namely, by showing “that this is best.” So far we have not taken into account what he there calls the “obligatory and containing power of the Good,” and in the *Republic* calls the “Idea of Good.” But it is to this, the highest knowledge of all, that the true philosopher must strive to attain.

For Plato the Good unites what to us seem three distinct factors :

(1) The Good is the universal object of desire, the end of all pursuit, aspiration and activity. If we desire food, we desire good food ; whatever we desire we desire because we regard it as good, or as a means to the good ; no one is satisfied with the appearance of good—the reality is what every one seeks ; everything else has value only as a means to this end ; this “every soul pursues and makes the end of his actions.”

The other two factors Socrates expresses by means of his analogy with the sun. Just as the sun is the author of sight in the eye and of visibility in the object, so the good is the author of the power of knowing (or intelligence) in the soul and of truth (or intelligibility) in the intelligible object. Hence the Good is :

(2) The author of intelligence and intelligibility, or of reason and rationality.

Again, just as the sun is the author of generation and growth in the visible world, so the good is the author of being or essence in the intelligible world. Hence the Good is :

(3) The author of being or essence in the intelligible world.

It is not difficult by means of simple examples to show that these three factors are all necessary aspects of the same thing. Firstly, what is really desired is always some end. It is this end which is really desired to which Plato attaches the term “good.” Secondly, any action is intelligible only in the light of the end at which it aims. My action in coming up here on a night like this, for instance, is quite unintelligible until you know that the end I had in view was the reading of a very indifferent paper to this learned body. Any action, then, is intelligible only in the light of the end at which it aims, and so the end may be spoken of as the author of intelligibility in the act. Again, your knowledge of my act can be called intelligent only when my act is intelligible to you. Likewise, then, in regard to my act, you can say that the end is the author of intelligence, or the power of knowing in the knower.

Again, it is obvious that the real nature of my act does not consist in the means that I adopt to get here, but in the end for which I come. The end, then, determines the real nature or true being of the means, and so can be spoken of as the author of the being and essence of my act. This is true not only of acts, but equally of possessions or things. The heart, for instance, is intelligible only in the light of its end, or, as we generally say in the case of things, in the light of its function. This constitutes its true nature or being. This is "what it is good for."

There is another point. What relative to one end is a means may itself be the end to which something else is a means. Likewise the end may be a means to something else. Hence, ends naturally form a hierarchy. We are led, in the end, to the conception of a graduated hierarchy leading up to one ultimate end or first and unconditioned principle. It is this ultimate or first principle that Plato calls the Idea of Good. The Idea of Good is both the ultimate end to which all things aspire and the ultimate source of the being and intelligibility of everything else.

The whole conception is teleological and organic. Just as the living body is more than the sum of its members and that for which they exist, though not something which can be separated from these, so the Idea of Good is more than the sum of those things of which it is the source and that for which these exist, but nothing that can be detached from these. The same applies to every other level with regard to what is below.

It naturally follows from this conception that the ideas, considered apart from the Idea of Good, are not ultimate principles, but only provisional explanations or hypotheses, themselves intelligible only in the light of the Idea of Good. The ideas, that is, are related to the Idea of Good in the same way in which the things which were said to participate in the ideas are related to them. The same relation is found, too, to occur within the world of particulars. But let us trace Plato's own discussion of the matter in terms of his famous simile of the divided line.

We began with the distinction between the intellectual and the visible worlds. These we can represent by a line divided unequally. To incorporate the distinction between the Good and the ideas and a corresponding distinction which arises in the visible realm, we must conceive of each of these parts as again divided in the same proportion as the original line. In the lower or visible division, the lower subdivision consists of images—shadows and reflections in water, etc.—the higher of animals and everything that grows or is made. Both sections of this division have different degrees of truth, and the copy is

to the original as the sphere of opinion is to the sphere of knowledge.

Let us pass then to the higher or intellectual division. The lower subdivision represents the ideas or essences as used by the sciences, *i.e.*, regarded as distinct and separate and self-sufficient, and conceived by the help of the visible objects in which they find expression or embodiment. The higher subdivision represents the ideas as expressions of the Good, *i.e.*, regarded as forming a systematic whole, as the articulation of one supreme principle, and are conceived thus by the intellect alone. Socrates expresses it in this way. In the lower subdivision the soul uses the figures given by the higher visible sphere as images; the inquiry can only be hypothetical, and instead of going upwards to a first principle descends to the other end. In the higher subdivision the soul passes out of hypotheses, making no use of images, as in the former case, but proceeding only in and through the ideas themselves. Glaucon does not quite understand, so Socrates endeavours to explain his meaning more clearly.

"You are aware that students of geometry, arithmetic and the kindred sciences assume the odd and the even, and the figures and three kinds of angles, and the like, in their several branches of science; these are their hypotheses, which they and everybody are supposed to know, and therefore they do not deign to give an account of them either to themselves or to others; but they begin with them and go on until they arrive at last, and in a consistent manner, at their conclusion.

"And do you not know also that although they make use of the visible forms and reason about them, they are thinking not of these, but of the ideals which they resemble; not of the figures they draw, but of the absolute square and the absolute diameter, and so on—the forms which they draw or make and which have shadows and reflections in water of their own are converted by them into images, but they are really seeking to behold the things themselves, which can only be seen with the eye of the mind.

"And of this kind I spoke as the intelligible, although in the search after it the soul is compelled to use hypotheses, not ascending to a first principle, because she is unable to rise above the region of hypothesis, but employing the objects of which the shadows below are resemblances in their turn as images, they have in relation to the shadows and reflections of them a greater distinctness and therefore a higher value.

"And when I speak of the other division of the intelligible, you will understand me to speak of that other sort of knowledge which reason herself attains by the power of dialectic, using the hypotheses not as first principles, but only as hypotheses—that is to say, as steps and points of departure into a world which is above hypotheses, in order that she may soar beyond them to the first principle of the whole, and clinging to this and then to that which is dependent on this, by successive steps she descends again without the aid of any sensible object, from ideas, through ideas, and in ideas she ends.

"The notions of the arts (or sciences) are also contemplated by the understanding, and not by the senses; yet because they start from hypotheses and do not ascend to a principle, those who contemplate them appear to you not to exercise the higher reason upon them, although when a first principle is added to them they are cognizable by the higher reason."¹

¹ Republic, 510-11.

It is now apparent why Socrates spoke of participation in an idea as only the second-best mode of inquiry into the cause. Likewise we must extend the term participation to cover the relation between shadows and things, and ideas and the Idea of Good, as well as between things and ideas, and ideas and ideas. Further, it seems reasonable to regard the four divisions of Plato's scheme as general classes rather than consecutive levels in the hierarchical scheme to which his conception of the Good naturally leads. The two higher divisions at any rate may contain an indefinite number of levels or steps. And, of course, Aristotle's discovery that the same thing would participate in several ideas was an obviously necessary aspect of Plato's thought, and presents no difficulty at all if you regard the idea as a universal or object of thought, and not as another thing dwelling apart from or over concrete things.

The first principle, you will notice, is above hypotheses, above ideas. That it must be so is obvious. Everything else is intelligible only in the light of the stage above it, in the light of what, for it, is an ideal. But there is nothing above the Idea of Good in the light of which it can be intelligible. Hence, the Idea of Good is not intelligible in the same way as everything else. That no doubt is why Socrates, in the *Republic*, says: "No, sweet sirs, let us not at present ask what is the actual nature of the good, for to reach what is now in my thoughts would be an effort too great for me. But of the child of the good who is likest to him, I would fain speak."¹ As Bradley would say, the nature of the good cannot be expressed in relational thought. As Plato suggests, it must be *seen*, you must behold it with the eye of the mind. As he says in the *Symposium*, with regard to the lover of beauty, "at last the vision is revealed to him of a single science, which is the science of beauty everywhere."² (The Absolute Beauty of the *Symposium* seems to be identical with the Idea of Good of the *Republic*.)

But this metaphor, too, is inadequate; the idea of good, as it were, swallows up not only thought, but also the thinker. Perhaps the term "swallows up" is misleading. I do not mean that in the idea of good thought and thinker simply disappear; instead, it is only in this that they achieve their ideal and are really real. What I mean is that just as the idea of good cannot be adequately characterized by, or really known in terms of, any predicate, because anything can be known only in terms of an ideal of which it falls short, so the idea of Good cannot be seen by a knower standing over against it. In effect, the Idea of Good is the One of Plotinus. Again, by implication at any rate, the term idea has, in a sense, become

¹ *Republic*, 506.

² *Symposium*, 210.

fluid. Explanation in terms of an ideal is possible at various levels, and at each level the ideal serves the same function as was served by the idea in relation to sensible things. That is to say, we have arrived at one feature of Aristotle's conception of Form, which is likewise one way of stating Bradley's doctrine of Degrees of Truth and Reality.

It should be noted that Plato's conception is not merely intellectual. He tends to speak of the First Principle indifferently as the Good, the True, the Beautiful, God. Knowledge or wisdom for Plato means any appropriation of the ideal, whether cognitive, æsthetical, practical or religious.

The general significance and implications of participation should now be clear. It either is or implies that organization of the real in virtue of which thought in the broadest sense, rational experience, is possible. Whether Plato himself used the word to stand for that whole organization or interrelation, or only for the objective side of it, is perhaps not quite clear from his dialogues, though if we speak of participation in the Idea of Good (as I think he does intend us to), it would not seem logically possible to restrict it to the objective side, for in the Good subject and object are one. Participation certainly stands for that relation between anything and its ideal, and between that and its ideal, until we reach the First Principle, in virtue of which it is intelligible, and probably stands also for the corresponding relation between the soul and the good in virtue of which the objective relation is intelligible to an intelligent mind. This relation could be described in many ways. We might speak of it as the teleological nature of reality ; as the immanence of the Good ; as the aspiration to and emanation from the Good, in virtue of which everything is what it is and is intelligible or intelligent ; as that which makes dialectic, or the advance of thought to and its return from the Idea of Good, possible ; as the basis of universality and meaning ; and in other ways.

THEORY AND PRACTICE IN MORALS.

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IN these days there is an obvious tendency to approach moral problems from the practical side. Both in academic study and in social life we hear a great deal of the dangers of divorcing moral theory from moral fact. This is a most desirable change in attitude; there can be little doubt that much of the discredit into which the science of morals has fallen can be traced to the tendency to separate moral theory from the actual affairs of life. Any change therefore that will tend to bring moral theory back to earth is to be welcomed. But this return to earth must be a real one, and not merely a step to seek cover under which the old games may be played freed from even the restrictions that the moral theorists would place upon them.

At the present time it is very necessary to remember that the history of life and conduct has clearly shown that men who are doing great things in any sphere, but more especially in the moral sphere, do not talk much about their achievement; they have their minds concentrated on the means by which the great results at which they aim may be made sure. When a people begins to make its conversation centre round its virtue and its virtues—courage, honesty, truth, justice—it seems to be an indication that the realities are disappearing, and that men and women in the absence of the realities are taking comfort by deceiving themselves with words. There probably never was an age before this one in which talk of morality and the virtues was more on the lips of men; it is doubtful if there ever was a period in which real morality and the fundamental virtues had a more tenuous existence. Today many men can not even rob in business or plunder in war except under the sacred names of truth and justice.

Of this spirit we can see many indications; but perhaps in business more clearly than in other aspects of life is shown the most fulsome homage paid to virtue with the most callous denial of the reality. Indeed, so deep has this deception gone, that one author¹ proposes to reconstruct ethical theory on the basis of the "ethical codes" of associations of traders, although most people realize clearly enough that these so-called "codes of ethics" are merely regulations to enable the different groups of traders to carry on their work with the greatest profit and the least conflict. In the introduction of this book the inner

¹ Edgar L. Herrinace, "Codes of Ethics," Free Press, 1924.

contradictions of the attempt are made manifest. The author stresses the importance of reducing the code to a written form (as are the regulations of a trade) and at the same time tells us that "the adoption of a code is not necessarily an indication of a higher ethical standard. In many associations which have not taken this step the code of honour and the sense of social responsibility may be as high or higher." Finally the author comes to this conclusion: "An ethical millennium is a long way off. But the general impression left on the student of these collected standards is one of sincere striving, of positive achievement. One may look forward to the growth of sound ethical adjustment among the American people. We have begun to gather the experience out of which may come in time a science of social ethics."

When one looks into the codes given by the author one finds them full of that deadly enemy of real morality—humbug. One or two illuminating excerpts must suffice:

"The seller who offers a lower price for equal quality and quantity shall get the order; it shall not be given to his competitor." (National Peanut Butter Manufacturers' Association.)

"In case two funeral directors are called at the same time to take charge of the same body, both should withdraw and leave the choice to the family." (National Funeral Directors' Association of the United States of America.)

In the ethical rules governing teaching "black-legging" is prohibited. "Should a condition so unethical ever exist in a community, or within a board of education, that the teacher is forced out of his position, and such a situation created that no self-respecting person can subscribe to the conditions maintained, such a position should be left absolutely open by professional men, and candidacy for the position on the part of those thoroughly advised of the conditions should be regarded as unprofessional." Readers of Upton Sinclair's "Goose Step" and "Goslings" will wonder at the relation between theory and practice.

Ethically plumbers have not the best of reputations, yet they seem to survive on five pages of "moral" rules, while medicine requires eighteen and law twenty-one. The nature of the medical code may be gauged from the following: "A profession has for its prime object the service it can render to humanity; reward or financial gain should be a subordinate consideration. The practice of medicine is a profession. In choosing this profession an individual assumes an obligation to conduct himself in accord with its ideals." We have heard something like this before. Is not the budding medico required by the University of Berlin to take the following oath? "I, A. B., swear that I will not practise medicine for the sake

of personal gain, but for the glory of God, the welfare of man and for the promotion of scientific knowledge." America seems to have improved upon this, for the declaration of a member of the American College of Surgeons runs: "Upon my honour as a gentleman, I hereby declare that I will not practise the division of fees, either directly or indirectly, in any manner whatsoever." Touching the question of scientific knowledge the rule seems to be this: "When a physician does succeed another physician in charge of a case, he should not make comments on, or insinuations regarding, the practice of the one who preceded him. Such comments or insinuations tend to lower the esteem of the patient *and so react against the critic.*" (Italics mine.)

This must suffice. In the face of such momentous moral decisions Jesus would hang his head and Socrates be dumb. Has the author of this work no acquaintance with the moral canons of the New Testament and with the Ethics and Politics of Aristotle? If the United States of America is waiting for a moral revelation out of these codes it is in a sorry ethical condition. Modern business is not likely to uplift moral ideals. Let the cobblers stick to their lasts. All the time I was reading this book the words of a great American were running through my head:

In short, I firmly du believe
 In Humbug generally,
 Fer it's a thing that I perceive
 To have a solid vally;
 This heth my faithful shepherd ben,
 In pastures sweet heth led me
 An' this'll keep the people green
 To feed as they have fed me.

It is humbug that is killing morality today. We have passed from the old customary morality of our childhood days, but have developed no new standards of our own, and are using the dust of the ancient law to throw in the eyes of the coming generation.

Another example of inner contradiction is to be found in that world-wide organization—Rotary. Mencken affirms that "when a gang of real estate agents (*i.e.*, rent sweaters), bond salesmen and automobile dealers get together to sob for service, it takes no Freudian to surmise that some one is about to be swindled. The cult of service, indeed, is half a sop to conscience and half a bait to catch conies." It would be grossly unfair to accept this author's view as typical of Rotarian practice, but every one is aware that in few cases indeed is the Rotarian motto, "Service before Self," practised (it may be it cannot be practised) by individual Rotarians in their business relations. But at least one Rotarian, Mr. Valdar, of Hamilton, New

Zealand, has been courageous enough to envisage the responsibility of the motto and has drawn up a code of ethics that, in his opinion (and I believe in the opinion of all fair-minded persons) represents the actual moral basis of modern business *at its best*. This he has thrown into contrast with the Rotarian code accepted by all business members of this organization. It is a comparison worth putting on record for the widest public and will enable us to see how far it is possible for people to remain Rotarians in spirit and in practice and also to continue in business.

(i)

THE ROTARY CODE FOR BUSINESS MEN OF ALL LINES.

Adopted by the Sixth Annual Convention at San Francisco, July, 1915.

My Business Standards shall have in them a note of sympathy for our common humanity. My business dealings, ambitions and relations shall cause me to take into consideration my highest duties as a member of society. In every position in business life, in every responsibility that comes before me, my chief thought shall be to fill that responsibility and discharge that duty so when I have ended each of them, I shall have lifted the level of human ideals and achievements a little higher than I found it. As a Rotarian it is my duty :

1st : To consider my vocation worthy, and as affording me distinct opportunity to serve society.

2nd : To improve myself, increase my efficiency and enlarge my service, and by so doing attest my faith in the fundamental principle of Rotary, that *he profits most who serves best*.

3rd : To realize that I am a business man and ambitious to succeed ; but that I am first an ethical man, and wish no success that is not founded on the highest justice and morality.

4th : To hold that the exchange of my goods, my service and my ideas for profit is legitimate and ethical, provided that all parties in the exchange are benefited thereby.

5th : To use my best endeavours to elevate the standards of the vocation in which I am engaged, and so to conduct my affairs that others in my vocations may find it wise, profitable and conducive to happiness to emulate my example.

6th : To conduct my business in such a manner that I may give a perfect service equal to or even better than my competitor, and when in doubt to give added service beyond the strict measure of debt or obligation.

7th : To understand that one of the greatest assets of a professional or of a business man is his friends, and that any advantage gained by reason of friendship is eminently ethical and proper.

8th : To hold that true friends demand nothing of one another and that any abuse of the confidences of friendship for profit is foreign to the spirit of Rotary, and in violation of its Code of Ethics.

9th : To consider no personal success legitimate or ethical which is secured by taking unfair advantage of certain opportunities in the social order that are absolutely denied others, nor will I take advantage of opportunities to achieve material success that others will not take because of the questionable morality involved.

10th : To be not more obligated to a brother Rotarian than I am to every other man in human society ; because the genius of Rotary is not in its competition, but in its co-operation ; for provincialism can never have a place in an institution like Rotary, and Rotarians assert that Human Rights are not confined to Rotary Clubs, but are as deep and broad as the race itself ;

and for these high purposes does Rotary exist to educate all men and all institutions.

11th : Finally, believing in the universality of the Golden Rule, "*all things whatsoever ye would that men should do unto you, do ye even so unto them,*" we contend that Society best holds together when equal opportunity is afforded all men in the natural resources of this planet.

(ii)

THE BUSINESS CODE FOR LIMITED LIABILITY COMPANIES.

Formulated by The Rotary Club of Hamilton, New Zealand, January, 1926, to illustrate the diversity between Rotary ideals and Business practices.

The Ethics of Business are governed by material values, as reference to the prospectus and balance-sheet of any company will show. The principal objective of company organization is production for profit, and the capital of a company is contributed on this understanding. To operate for material profit is therefore the principal aim of a company, and the bigger the profit the higher the status in the eyes of the commercial world, provided the laws of the country are not infringed. In view of this, it is suggested that fundamental to a code of business ethics, *as at present practised*, are the following principles :

1st : A company considers its occupation a worthy one, as affording it an opportunity to serve its own ends and incidentally society.

2nd : A company strives to be efficient in order to increase its custom rather than to benefit its customers.

3rd : Companies are essentially business concerns which work on a standard of morality peculiar to their own interests, restricted only by the laws of the land.

4th : Companies exist to exchange their goods and services to their own advantage. In such exchange it is legitimate to give as little as possible in return for as much as possible, consistent with retaining the custom and confidence of the party with whom the exchange is made.

5th : A company endeavours to elevate the standard of business in its vocation in order that its prestige may be increased and greater opportunities for success be presented.

6th : A company aims at conducting its business in such a manner as to give a service equal to or better than its competitors, as by so doing it will enlarge its opportunities for making profits.

7th : To understand that one of the greatest assets of a professional or business man is his friends, and that any advantage gained by reason of friendships is eminently ethical and proper.

8th : True friendship implies standing by one another, abuse of friendship is double-edged, spells loss of friend and loss of business.

9th : To hold that the wages system is a proper and sufficient means of purchasing the services of our fellow-men, and that after the payment of the agreed-on wage, the recipient is not entitled either legally or morally to any further reward. That it is legitimate to purchase such service at the lowest market rate, subject to the law of supply and demand, and that there is no distinction in principle between the purchase of human service and the purchase of goods.

10th : To hold that human society affords opportunity to all to acquire wealth ; that the possession of wealth is the only recognized medium through which membership in company organization can be acquired ; that human rights as such have no similar status, and that consequently human rights do not carry with them privileges of a similar nature to those attributed to property rights.

11th : Companies generally can be relied upon to reciprocate fair treatment, but the principles on which the Golden Rule is based are not contemplated in the constitution of present-day business organization.

No one can read these two codes without being struck by the reality of (ii) and the unreality of (i). I believe that every one will admit that the Business Code for Limited Liability Companies is an honest and successful attempt to frame the ethical principles that control modern business when it is conducted on the highest level possible in modern society. Few, it may be true, live up to it. But when we turn to the Rotary Code we pass to a world of unreality. Many points that illustrate this suggest themselves, but for the present one or two must suffice.

Rule 1. "To consider my vocation worthy." Can it be said that vocations, irrespective of the way in which they are conducted, are rightly called worthy? Is it true that all Rotarians are engaged in occupations that are worthy? Surely the great need of our day is a review of occupations to determine which are socially worthy.

Rule 2. "He profits most who serves best." This is one of the most ambiguous mottoes ever framed. Does it imply that those who give the best service to the community will obtain the greatest material profit? Does it mean that those who serve the community will obtain their due reward in the gratitude of society? The whole line of martyrs refutes any of these interpretations. What then does it mean? It appears to have the great value for modern business that it is capable of almost any interpretation. Perhaps it was this motto that led Mr. Mencken to frame his harsh criticism.

Rule 3. "Can modern business be conducted on this principle?" Many years ago the historian Froude gave strong evidence for thinking that it could not, and things have not improved since he wrote.

Nearly every rule of the Rotary Code, as the other code clearly shows, is a statement in words of principles denied in the actual practice of the modern business world. It provides an excellent instance of words taking the place of things; it shows that men are flying from the difficult task of the practice of the fundamental virtues in modern business and are taking refuge in a world of moral fantasy, where they can obtain emotional satisfaction by accepting the verbal statement of principles that do not need to be brought into relation with the needs of practical life. Psychology has shown how easy it is for men, faced with the increasing difficulties of life, to retire to an ideal or imaginary world free from the conflicts of actual existence. As far as business is concerned, may not Rotary be pointed to as a world-wide instance of this tendency?

THE NATURE OF SUGGESTION.

By ALFRED A. CONLON,
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THE problem of suggestion is one which has not fully engaged the attention of investigators until very recent years, and it is still in an unsettled condition. The first mention of the subject in the "Indexes" is in 1899, and from that time sundry conjectural writings appeared in gradually increasing numbers until 1913-14, when a complete break occurs in the output of literature. During the war, however, the development of psycho-analysis and the progress of psychotherapy brought the question of suggestion once more to the forefront.

The study of suggestion is of outstanding importance: it provides a most effective method of mental healing; it is a fundamental consideration in practical education; it is the basis of the theory of advertising and salesmanship; it explains, partially at least, many social institutions, such as conventionality in dress and speech; and, finally, I have no doubt that it plays an important part in the formation of ideals of self and of moral behaviour.

Just as the study is important, so also is it very complicated. It seems that at present we have not progressed any further than the descriptive stage of investigation. The circumstances under which suggestion occurs are apparently known; so also are many of its attributes. But when we search literature for an adequate definition, and this is essential to an understanding of the nature of suggestion, the greatest diversity of opinion is found. By way of illustrating this point I have collected the definitions of most of the modern authorities so that they may be readily compared (*vide* Appendix). There is comparatively little difficulty about fixing the "genus"; but I am quite unable to find a wholly satisfactory "differentia"—indeed, it seems that suggestibility cannot be clearly and finally differentiated from such basic attributes of mental activity as instinct and association. Suggestibility is one of those aspects of organic activity which is directly traceable to organic structure; thus it gradually and sometimes imperceptibly shades off into the processes of association, ideomotor activity, and instinct. Consequently, we are treading much surer ground, if, as Titchener suggests, we seek a physiological rather than a psychological definition, although the latter must also be attempted.

It is necessary to consider (a) the known attributes of suggestion and (b) the circumstances under which it occurs.

In the process of suggestion there are three generally accepted stages: (1) The conveyance of a stimulus¹; (2) its acceptance; (3) a resulting reaction. The first and third are also characteristic of many other forms of organic activity, *e.g.*, the simple reflex. The crux of the discussion is therefore the conditions of acceptance of a suggestion. However, the conditions favourable to the acceptance of a suggested form of thought or action are those whereunder it would work itself out into an appropriate response. Suggestibility is therefore intimately connected with ideomotor activity.

In order that an idea or mental process may express itself in overt action, it is necessary (1) that it occupy the focus of attention. This means that the psychic energy must be concentrated in the centres concerned in such force as to initiate the requisite efferent impulses. It is now almost an axiom of psychology that "thought is an act in a nascent state." But the completion of the act depends upon freedom from obstruction and from the effects of contrariant tendencies; also upon the driving power of interest. This is important because suggestion only operates when critical judgment is suspended. (2) It is necessary that the idea or mental process be in harmony (*a*) with the prevailing mental set, (*b*) with the organized system of emotions, sentiments, complexes and ideals which constitutes the individual's character. This analysis leads one to complete agreement with Lipps² in that the characteristic of these conditions lies in "a specific combination of intact psychical energy with diminished psychical excitability." By the concentration of mental energy about the idea, the excitability of other centres is diminished. Especially is this true when some strong sentiment, native tendency or complex is involved. This, it seems, is the meat of the discussion.

The preceding paragraph deals with the conditions under which any idea is acted upon. We may act as a result of a fully deliberated judgment, in which case the action is not completed until the mental conflict or weighing of the issues is resolved. But it is an outstanding characteristic of a suggested response that the resulting action takes place without the interference of critical judgment. The absence of debate or critical judgment, however, cannot be used as an adequate "differentia" in definition (*vide* Appendix, Nos. 1, 5, 8, 10, 13, 14). For example, it does not differentiate the phenomenon of suggestibility from such native specific tendencies as anger and fear; nor from the case where a certain response is suggested merely by a conditioned stimulus. We can only say that

¹ In auto-suggestion the stimulus is subjective and arises from the individual's own train of thought.

² *Vide* Ernest Jones, "Nature of Auto-suggestion" (Bibliog.).

freedom not only from mental but also from emotional conflict is an essential attribute of the operation of suggestion.

If this is true, it may be definitely stated that the conditions conducive to greater suggestibility are those in which critical judgment and the possibility of conflict are minimized. These fall into two classes: (1) A person may be congenitally predisposed to suggestive influences. McDougall would describe this as having a strong native tendency to submissiveness. It seems especially to be the case with those who have a weak constitution, or are roughly classed as neurotics. (2) Conditions which result from some present specific state: (a) youth, (b) inexperience, (c) emotional states, (d) prevailing complexes, (e) surprise, (f) dissociation, (g) reverie, (h) fatigue, (i) certain abnormal physical states induced, for example, by drugs, (j) hysteria, (k) hypnotic states, (l) hypnoidal and hypnagogic states, (m) operation of herd instinct, (n) intensity of stimulation, (o) appreciation of prestige of source. These facts are not merely conjectural, but have been carefully worked out by experiment and clinical experience (*vide* Bibliography). The treatment of each of these conditions is really the subject of a separate discussion, because being once established, they remain particular instances of the phenomenon, and for the purposes of the theory of the nature of suggestion are only of interest collectively.

It is interesting here to note the view of suggestion put forward by Janet. He holds that it is essentially an abnormal phenomenon, and characterizes it as the "fundamental stigma of hysteria." But Janet, in his capacity of psychiatrist, was limited to the observation of suggestion under the special circumstances of the clinic and to adult subjects. What he says is true, but his remarks need modifying to include *all* the circumstances noted above. From the comparatively great suggestibility of all children, it may be argued that suggestion is a perfectly normal phenomenon and is a *general native-reaction-tendency*. But as the personality of the child gradually develops, susceptibility to suggestion gradually decreases. The gradual organization of sentiments and ideals provides an ever-increasing obstacle to the free acceptance of ideas from without. The greater the unity of the character the less will the subject be amenable to suggestion except from that which is in harmony with his unified character. But it is quite safe to say that perfect unity of personality is very rare, or perhaps does not occur at all. All men are subject, more or less, to emotional experiences (this is quite a normal process), and in moments of this kind are susceptible to suggestive influences. The lover, for example, sees "the beauty of Helen in the brow of Egypt." Suggestibility, which is a general native-reaction-tendency dictated by structure, never entirely disappears from a

personality ; it is facilitated by certain variable conditions which may be either normal or abnormal, and the only permissible generalization from the known facts is that it varies inversely as the degree of conflict.

I have already stated that it is necessary to regard suggestibility as a native-reaction-tendency. It differs from instinct in that it is general while they are specific. Instinctive responses may result from the operation of suggestive influences. This differentiation needs special elaboration, but it seems nevertheless to be substantially true. It is a far more difficult task to differentiate suggestion from association activity. Many of the laws of association are also true of suggestion. It seems that association is a purely subjective process, while in suggestion the stimulus comes more or less abruptly from without. This does not, however, differentiate auto-suggestion from association. There seem to be two other differences : (1) A suggested idea is *adopted* as being a spontaneous expression of the personality. When association activity produces an idea which is "adopted" in the same way, we get auto-suggestion. (2) There is a tendency to overt expression. From these considerations I would put forward tentatively the following definition : Suggestion is a *general native-reaction-tendency* whereby a specific objective stimulus calls forth an overt response which would not have followed in the ordinary sequence on mental processes. The *genus* here used seems to be indisputable, and the *differentia* seems to be the least objectionable.

This definition does not cover auto-suggestion very satisfactorily. This seems to me to be not precisely the same process. Although it has many characteristics in common with ordinary suggestion, it differs from it in that conscious effort is employed to reduce or remould conflicting complexes or sentiments by withdrawing from them the attention which is then used to reinforce the self-suggested idea ; whereas, on the other hand, an ordinary stimulus depends for its suggestive power purely on the present condition of the individual on whom it falls.

So far I have discussed some of the attributes of suggestion, the circumstances under which it occurs, and also the question of definition. There remains, however, a very important consideration : the psychotherapeutic value of suggestion. This is a property which has not been fully investigated under experimental conditions. Nevertheless, it is definitely established that functional disorders of the mind may be successfully treated by suggestion. It is also certain that there may be produced by suggestion such organic changes as sneezing, reddening, growing pale, changes of temperature and rate of heart-beat, menstruation, action of the bowels, drunkenness ;

real sensations may be abolished or hyperæsthesia induced (*vide* James "Principles," Ch. XXVII). These seem to be facts of almost a mystical order, and until further work on them is carried out we can say nothing more than that they seem to be properties of suggestion which must be placed on record.

In concluding, I would like to be allowed to revert again to the proposition that "suggestion is a general native-reaction-tendency." If this were remembered it would keep the issue much clearer. Suggestion is a phenomenon which arises purely out of the structure of the organism, and one is tempted to bring into the discussion the biological concept of the "two levels." With some idea of this kind in the back of our mind, and remembering the penetrating remarks of James that "all consciousness is motor," and of Ribot that "thought is an act in a nascent state," we are really at the heart of the problem.

APPENDIX.

A list of the definitions found in the literature on "Suggestion."

1. F. W. H. Myers : Suggestion is a successful appeal to the subliminal self.
2. Baudouin : Suggestion is the subconscious realization of an idea.
3. Bernheim : La suggestion est l'acte par lequel une idée est introduite dans le cerveau et acceptée par lui.
4. McDougall : Suggestion is a process of communication resulting in the acceptance with conviction of the communicated proposition independently of the subject's appreciation of any logically adequate grounds for its acceptance.
5. Janet : La suggestion est le développement complet et automatique d'une idée qui se font en dehors de la volonté et de la perception personnelle du sujet.
6. Parmelee : Suggestion is the process by which a stimulus is transmitted from a receptor centre to a motor centre by means of an association centre.
7. John Morgan : Suggestibility is an attitude or set which makes a person amenable to a wide range of stimulus situations.
8. Shrenk-Nötzing : Suggestion is the narrowing of the association activity solely through the employment of memory and imagination in such a way that the influence of combinations of contrariant ideas is weakened or removed, as a result of which the intensity of the suggested contents of consciousness rise above normal.
9. Collins and Drever : Suggestion is the mental process which results in an individual accepting without logical grounds and acting without deliberation upon ideas conveyed by the words, attitudes and acts of other people.
10. Titchener : A suggestion is any stimulus, external or internal, accompanied or unaccompanied by consciousness, which touches off a determining tendency.
11. Ginsberg : The term suggestion is used for the cognitive side of imitation.
12. Warren : Suggestion is a form of mental association : one thought passes over into another.
13. Hunter : Suggestion is defined as the process of accepting uncritically an idea that is encountered in social situations.
14. Woodworth : Suggestion works when it gets response without awakening the resistance which might be expected.

15. Boirac : We observe suggestion each time a person evokes in another person an idea which the other would not have entertained in the ordinary course of his thought.

16. James does not offer any clearly-cut definition of suggestion.

BIBLIOGRAPHY.

- Jamés : "Principles," Vol. II, Ch. XXVII.
 McDougall : "Outlines of Abnormal Psychology."
 McDougall : "Social Psychology."
 Collins and Drever : "Experimental Psychology," Ch. X.
 Ginsberg : "Social Psychology."
 Warren : "Human Psychology," p. 127, p. 281.
 Titchener : "Textbook of Psychology," p. 449.
 Hunter : "General Psychology," p. 93.
 Woodworth : "Mental Life," p. 546.
 Satow : "Hypnotism and Suggestion."
 Hollander : "Hypnotism and Suggestion."
 Baudouin : "Suggestion and Auto-suggestion."
 W. Brown : "Hypnosis and Suggestion," *Lancet*, 1922, p. 263.
 Ernest Jones : "Nature of Auto-suggestion," *Br. Jn. of Psych.*, 1923, 10, p. 194.
 John Morgan : "Nature of Suggestibility," *Psy. Rev.*, 1924, p. 263.
 Walter Scott : "Suggestion" (a critique of certain current publications), *Psy. Bull.*, 1923, p. 266.
 Bernard Muscio : "The Influence of the Form of the Question," *Br. Jn. of Psych.*, 1916, 8, p. 351.
 E. Boirac : "La suggestibilité comme fait et comme hypothèse," *Rev. Phil.*, 1916, 82, p. 94.
 K. Campbell : "A Case of Auto-suggestion Blindness," *Lancet*, 1922, p. 276.
 R. L. Archer : "What is Suggestion ?" *Jn. Exper. Ped.*, 1919, 5, p. 7.
 Robert Thouless : "Suggestion and Auto-suggestion," *Discovery*, 1921, Vol. 2, p. 293.
 Emma Caillard : "Cure by Suggestion," *Contemp. Rev.*, 1919, 116, p. 216.
 R. H. Gault : "Suggestion and Suggestibility," *Amer. Jn. Sociology*, 1919, 25, 185.
 J. C. Flower : "Suggestion," *Br. Jn. Psych.*, Med. Section, 1923, 3, p. 39.
 E. Prideaux : "Suggestion and Suggestibility," *Br. Jn. of Psych.*, 1920, 10, p. 228.
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RESEARCHES AND REPORTS.

SOME AGE NORMS FOR THE "WOODWORTH-WELLS' SUBSTITUTION TEST."¹

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THE test is well known. The printed form consists of fifty geometric figures of five kinds (square, circle, triangle, star, and Greek cross) arranged in five rows of ten symbols. The key is printed above these, and consists of a representative of each of these figures in which are placed one of the first five numerals. The subject has to fill in each of the blank figures with the same numeral as in the key, and as quickly as possible. No previous Australian norms have been recorded for the test.



FIG. 1.

The test, as pointed out by Whipple⁽¹⁾ and Woodworth and Wells⁽²⁾, measures the speed with which new associations are formed by repetition. Modelling their work on that of Lough⁽³⁾, Woodworth and Wells introduced the symbols because the associations would be new and not adapted to

¹ The writers desire to tender their thanks to Dr. A. H. Martin who suggested and supervised the work, to Mr. J. Ross-Thomas, Chief Inspector, Education Department, for permission to enter the schools, and to members of the school staffs for their valuable co-operation which ensured the success of the testing.

memorizing by mnemonic methods. Whipple devised a similar group test, but provided numbers as the key, the figures themselves requiring to be drawn; this method has obvious drawbacks.

PROCEDURE.

Our aim was to obtain age norms for New South Wales secondary school children from 13 to 17 years. A good sampling of 1,459 boys and 1,143 girls from commercial, technical, domestic and high schools was tested. The procedure used was simple and the test was administered as an individual test given to a group. Procedure was carefully explained and demonstrated by the experimenters working through an enlarged form on the blackboard similar to the test sheet. In accordance with the authors' instructions, it was carefully pointed out that the key on the sheets and not the demonstration key was the one to be used for the test, also that the symbols in each line were to be completed in sequence before starting the next one. The whole of the demonstration and administration was carefully standardized and presented in exactly the same way for each class. The group took its own time from numbered cards which the demonstrator showed once per second and which indicated the number of seconds the group had been at work. Each subject was required to record his time on the back of his sheet, also his age in years and months, name, class, etc. It was considered—and the writers think justifiably—that the risk of wrong timing, either accidentally or deliberately, was negligible among children of the ages tested.

Marking was expedited by the use of stencils. Errors were assessed proportionate to the time of completion as outlined by the authors of the test. Thus, additions were made in times of

under 62 seconds	of 1 second for each error,
from 63 to 87 seconds	of $1\frac{1}{2}$ seconds for each error,
from 88 to 112 seconds	of 2 seconds for each error,
from 113 to 137 seconds	of $2\frac{1}{2}$ seconds for each error,

and similarly for higher scores. The number of mistakes was very small. Amongst these an interchange of the numbers for the square and circle was most noticeable, due probably to their comparative simplicity of form and adjacency in the key. In a few cases the first symbol was wrongly marked with the number 1.

RESULTS.

Table I shows the number of children—boys and girls—tested at each age, and gives the averages, average deviations and standard deviations. Table II demonstrates how the scores are scattered throughout each age group.

It will be seen from the graphs that the boys were superior in the test until about $13\frac{1}{2}$ years, when the girls take the lead till $15\frac{1}{2}$ years, after which there is superiority among the males. After the age of 16 or 17 years the development of general intelligence ceases for both sexes; the conditions of this particular type of associative learning appear to be similar as shown in the results. The ogive curves for years 13, 14 and 15 in both sexes are separate, but the 16- and 17-year curves overlap. The average time decreases with increase in age, with only one exception, the 17-year girls. The numbers tested in this group are not considered large enough to give reliable results.

CONCLUSIONS.

The aim of the test was to establish age norms for the children selected, and this has been satisfactorily realized, since they are quite distinct up to 17 years. The standard deviations are rather high and indicate a large overlap; this is to be expected in a test of this variety, which measures general learning ability. However, this should not prevent future administrators of the test from satisfactorily comparing their results with these norms. It is noteworthy that with a highly selected group such as a University class the average is much higher, namely, 64 seconds, as compared with 82 seconds for the 17-year-old school children.

The test appears to be useful in investigating typewriting ability, but such work remains to be carried out at a later date. Again, little or nothing has been done to correlate the test results with the recognized tests of general ability and educational ability; the correlation for these should, from expectation, be fairly positive.⁽⁴⁾

LIST OF REFERENCES.

- ⁽¹⁾ Whipple: "Manual of Mental and Physical Tests," II, ff. 499.
- ⁽²⁾ Woodworth, R. S., and Wells, Frederick L.: "Association Tests," *Psych. Monogs.*, Vol. XIII, No. V, Ch. 6, "Formation of New Associations."
- ⁽³⁾ Kirkpatrick: "Archives of Psychology," 1909.
- ⁽⁴⁾ Cf. "Reports of Industrial Fatigue Research Board" (Muscio), No. 12, p. 14.

TABLE I.

Boys.

Age Group.	Number of Cases.	Average.	Average Deviation.	Standard Deviation.
11½-12½	105	103.3	14.9	18.7
12½-13½	317	99.3	13.0	16.2
13½-14½	464	95.9	13.7	17.2
14½-15½	323	89.3	11.4	14.3
15½-16½	174	81.7	13.1	16.4
16½-17½	76	80.8	11.9	15.0

Girls.

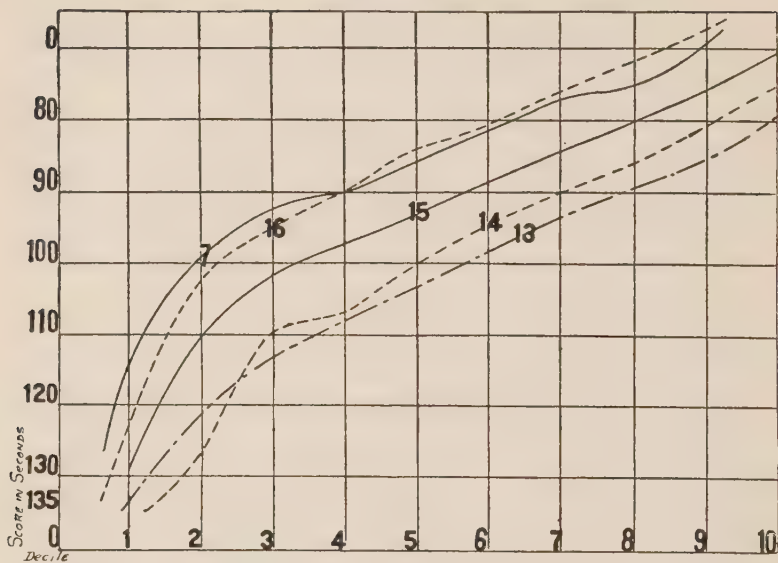
Age Group.	Number of Cases.	Average.	Average Deviation.	Standard Deviation.
11½-12½	118	115.7	17.4	21.8
12½-13½	322	110.7	14.3	18.0
13½-14½	304	91.8	13.0	16.3
14½-15½	193	85.3	11.4	14.3
15½-16½	128	82.0	9.8	12.8
16½-17½	88	82.5	8.5	10.6

TABLE II.

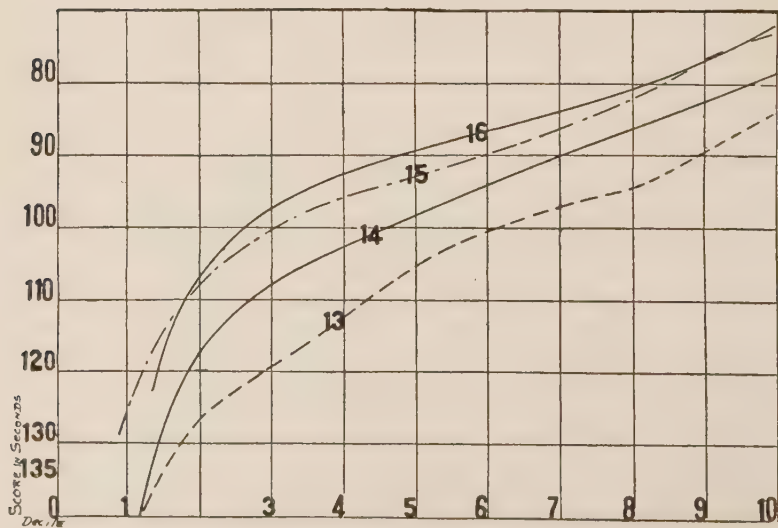
Age Distributions.

Scores in Seconds.	Years.				
	13	14	15	16	17
45-54	1	3	3	17	3
55-64	4	14	26	40	11
65-74	21	57	61	81	33
75-84	89	155	131	78	59
85-94	130	163	126	40	35
95-104	128	121	86	29	13
105-114	92	79	34	7	8
115-124	62	34	10	9	1
125-134	18	17	7	—	1
135-144	13	5	2	—	—
145-154	8	4	1	—	—

GRAPH No. 1.
Ogive Curve for Boys.



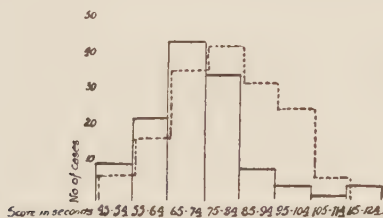
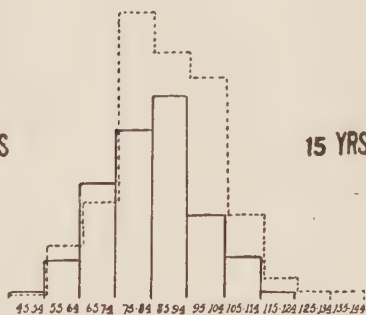
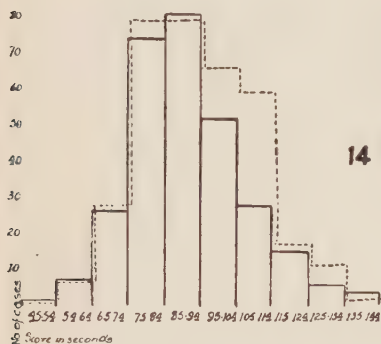
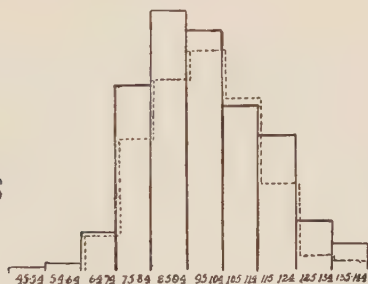
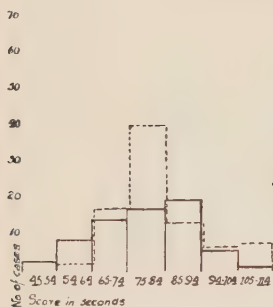
GRAPH No. 2.
Ogive Curve for Girls.



GRAPH NO. 3.
Histogram Distribution for Age Groups.

Boys -----

Girls -----



REVIEW ARTICLE.

THE NON-EXISTENCE OF CONSCIOUSNESS.

IN spite of the important advances towards realism which have been made in recent philosophical work, there has not yet been established anything which could be described as a realist school. This is due to the fact that the realist position has been insufficiently worked out, so that we have many competing mixtures of realism and idealism with, as is natural, no clear criterion for deciding among them. Such difficulties invariably arise when any important innovation in theory is made; it is impossible to recognize immediately all that it implies, and many views, which harmonize only with the position that has been abandoned, are still taken as a matter of course. Hence, it happens that the real value of the discovery is often lost, and that backslidings are almost as common as conversions. A particularly sustained effort is required to remove all the germs of idealism, so deeply has it penetrated into the systems and traditions which make up "modern philosophy."

These statements can best be supported by reference to the work of Professor Alexander, who has given the fullest and most logical statement of realism yet presented,¹ but with such concessions to idealism as have rendered it practically ineffective, greatest interest, as was only to be expected, having been taken in the idealistic elements in his theory, and particularly in the notion of "emergence" which he did not even initiate. It is singularly unfortunate that he should have preferred an attitude of conciliation to the denunciation of false doctrine. The result has not been to make his general position any more attractive or even intelligible to his opponents, while those who might support it must very often fail in the task of disentangling his genuine contribution to philosophy from the forced interpretations and special pleas by which his statements on consciousness and perspectives, on truth and goodness, are supported and reconciled with it. When the separation is made, it will appear that in his doctrine of Space-Time he has laid the foundation of a thoroughgoing realism as a logic of events. But the greatest obstacle to this consummation is to be found in his theory of consciousness.

This theory is anti-realist and is, in fact, Cartesian; and history has shown how Cartesianism leads on to absolute idealism. To get rid of idealism we have to go back upon all sophisticated "modern" views and recapture the Greek directness. We have to banish mind from philosophy, and in so doing make incidentally possible a positive account of mind itself. The position from which realism in these days has taken its departure, and with which the name is most closely associated, is that we are able to know what *exists independently*. It follows that the study of anything is not, on account of its being a study, at the same time a study of mind, and that the study of mind must be a definite, particular undertaking; or, as Alexander himself puts it (Introduction, Vol. I, p. 7), "that minds are existences in a world of existences and alongside of them." Yet he contends that this statement would be accepted by absolute idealism (though "with qualifications"), and he adopts the very view of the study of mind which realism would lead us to reject. This indecision is due to insufficiently close analysis of the nature of idealism.

The essence of absolute idealism, he says, "consists not so much in its idealism as in its faith that the truth is the whole, in comparison with which all finites are incomplete and therefore false. With the omission of the concluding phrase, 'and therefore false,' the proposition might be

¹ "Space, Time and Deity." By S. Alexander. London: Macmillan & Co., Ltd. First edition, 1920. Reprinted, with new Preface, 1927. Two volumes. Price: 25s. net.

accepted by other doctrines than idealism." But the faith that the truth is the whole, or that there is such a thing as *the* truth or *the* whole, is precisely idealism. The denial of independent existence to things which are related to mind is only an example, though historically an important one, of the denial of independent existence to things in general in relation to the Absolute or the ideal. Certainly, if we call this ideal "mind," it is not what we ordinarily mean by mind, in speaking of our relations with things of that character; but so much the worse, idealists will say, for what we ordinarily mean by mind. When any search is made for an ultimate, a standard, an unconditioned or rather self-conditioned condition of things (and the search for the ultimate is idealism or metaphysics), then, in place of the independently existing, we have, on the one hand, the self-subsistent as the basis of things, and, on the other hand, the relative existence of things to that basis. So that, consistently with its initial assertion in regard to knowledge, realism must deny any sort of ultimate. In particular, it must deny "universals," which is one of the points on which realism has hitherto failed. It (*i.e.*, as misrepresented by its sponsors) has been reationalistic instead of empirical, and Alexander, though he sets out to be empirical, is very often rationalistic.

The history of Greek philosophy shows with the greatest clearness the inevitable passage from rationalism to idealism, the coalescence of the many ultimates into the One. It shows with equal clearness the untenability of the latter view, its fatal admissions even in *denying* the many. In brief, the notions of "relative existence" and "self-subsistence" are both confused; if "all finites are incomplete," then the incompleteness of any one is a complete or absolute fact, and yet it is not "the whole"; and there must be a distinction between the Absolute's sustaining itself and the self which is thus sustained. If theory is to be possible, then, we must be realists; and that involves us in a denial of monism, or of a Being which is the whole, a "universe," and in the assertion of a single *way* of being (as contrasted with "being ultimately" and "being relatively") which the many things which we thus recognize have. This is just that independent existence of which realism speaks; more particularly, it is occurring or happening or being in Space and Time. That is the real fruit of Alexander's teaching, divested of his concessions to monism and to its offspring, "consciousness."

It would be unnecessary, then, for Alexander even to propose to treat the independent existence of things, as contrasted with their existence "in experience," as a hypothesis, if he began by demonstrating that otherwise we could not have theory at all. But his statement (p. 8) that "all philosophies are concerned with experience as a whole" is not even consistent with his hypothesis, and the finding of minds *alongside* of other existing things is, if "it is experienced differently from them," a sheer impossibility. The analysis of experience which he proceeds to give (p. 11) exhibits all the confusions from which idealist arguments have ever suffered, and for that reason is worth quoting in full.

"Any experience whatever may be analysed into two distinct elements and their relation to one another. The two elements which are the terms of the relation are, on the one hand, the act of mind or the awareness, and, on the other, the object of which it is aware; the relation between them is that they are together or compresent in the world which is thus so far experienced. As an example which presents the least difficulty take the perception of a tree or a table. This situation consists of the act of mind which is the perceiving; the object which is so much of the thing called tree as is perceived, the aspect of it which is peculiar to that perception, let us say the appearance of the tree under these circumstances of the perception; and the togetherness or compresence which connects these two distinct existences (the act of mind and the object) into the total situation called the experience. But the two terms are differently experienced. The one is experienced, that is, is present in the experience, as the act of experiencing; the other as that which is experienced. To use Mr. Lloyd

Morgan's happy notation, the one is an *-ing*, the other an *-ed*. The act of mind is the experiencing; the appearance, tree, is that upon which it is directed, that of which it is aware. The word "of" indicates the relation between these two relatively distinct existences. The difference between the two ways in which the terms are experienced is expressed in language by the difference between the cognate and the objective accusative. I am aware of my awareness as I strike a stroke or wave a farewell. My awareness and my being aware of it are identical. I experience the tree as I strike a man or wave a flag. I am my mind and am conscious of the object. Consciousness is another general name for acts of mind, which, in their relation to other existences, are said to be conscious of them as objects of consciousness."

In this passage Alexander begins by confusing one of the terms of the relation with the relation itself. When we speak of "the object of which an act of mind is aware," then clearly the relation between the act of mind and the object is expressed by the words "aware of" and not by "of" alone. Instead of "the act of mind which is the perceiving," we should read "which *does* the perceiving" or "which has the relation 'perceiving'" to whatever is perceived. We might just as well identify the tree, as Berkeley does, with its being perceived, as identify the act of mind with its perceiving. As it is, we have said nothing about the act of mind except that it has a certain relation; we are not entitled to say that all acts of mind have this relation and so to repudiate, as Alexander later does on no other basis than this, the Freudian "unconscious"; we have found no general name for acts of mind (and no relational term, awareness, consciousness or other, could be such a general name) except acts of mind. It should be noted, moreover, that when the relation, reduced to "of," is expressed as togetherness in some situation, it is symmetrical; that is, either term may be called the knower and the other the known, as in James's theory of "intersection"—which is certainly not what either James or Alexander intends or adheres to. The unfortunate feature of this contention of Alexander's is that, when he comes to deal with the actual spatio-temporal relation of togetherness, he imports into it certain of the peculiar characteristics of knowledge, and so is developed the theory of perspectives, which opens the way to relativity; just as the idealists begin by treating mind as an absolute, and end by treating the Absolute as having some of the real characters of mind, and so make "the universe" progress, and logic along with it.

Alexander goes on to make the perfectly gratuitous assumption that both terms in "the total situation called the experience" are experienced (the question of the way in which the relation between them is experienced is dealt with later and raises fresh difficulties), that whatever is "present in an experience" must somehow be experienced. The *-ing*, it appears, is *-ed*, but, of course, it is *-ed* in a different way from that in which the *-ed* is *-ed*! It ought to be clear, without any argument, that what is experienced or known in any experience is the object; that is what we mean by the object. It is, indeed, possible that that which knows that object, or again the relation between the two, may *also* be known, *i.e.*, may also be an object, but there is nothing in the first thing's being known to show that this must be so; and where it is so, the second thing's being known will be a *different* experience. To assert that mind can be experienced only by and in its experiencing something else at least wants proof. But no proof can be given without making the surrender to idealism completely apparent, if it is not already apparent in the phrase "My awareness and my being aware of it are identical." When mind is treated as essentially "subject," things must be treated as essentially objects, *i.e.*, as having their existence in their relation to mind. It is necessary, therefore, to deny that the two terms are differently experienced, when it happens, as it need not, that that which knows is known or experienced at all; and so to deny that "I am aware of my awareness" is analogous to "I strike a stroke," which is merely an

extended way of saying "I strike." The difference is that if I am to talk of my awareness, then I must be aware of it, must have it as an object to which terms can be applied. If Alexander were correct in supposing that only my awareness of *X* can be aware of my awareness of *X* (and why should anyone suppose this?), the term awareness would never have been employed. But if what we experienced *were* always a situation in which knower and known were together, if that were what every bit of the world that we came across was like, then the idealist conclusion that the world is a system of knowings would be irresistible.

The names which Alexander proceeds to give to the different ways of experiencing (which naturally follow from the different ways of being experienced, that is, of being present in an experience) are enjoyment and contemplation. "The mind enjoys itself and contemplates its objects." The realist position is, then, that there is no such thing as enjoyment or self-sustaining knowledge ("consciousness"), but that if minds are known, as they are, they are contemplated, and if relations of contemplation are known, as they are, they are contemplated. Curiously enough (or naturally enough, if we think of his realism as striving to break down the barriers which his unrealistic adherence to Descartes and Spinoza has erected), Alexander admits that these things *can* be contemplated, but only by beings at a higher level than ourselves, "angels." Psychology is then possible by anticipation of the angel's view. But how can we anticipate or know anything about the angel's view, since all that we know is at a lower level than ourselves? And how can the angel help being *wrong*? "What the angel sees as the compresence of two objects I experience as the compresence of an enjoyed mind and a contemplated non-mental object" (p. 20). The angel sees a thing of a peculiar quality, a mind, but he cannot see its self-relation, its experiencing itself by being itself. The realistic angel would, in fact, repudiate knowing by being; he would maintain that if we could only *be* ourselves, then we could not know ourselves at all.

Alexander, indeed, appears to think that in introducing this idealist conception of enjoyment or knowing by being, he is preserving realism. Certainly, in relation to the position that knowledge is a relation between two different things, my knowing myself presents a difficulty; but not my knowing other persons, and therefore the contemplation of mind in general. But to one who treats of *acts* of mind, who regards things as events, there should be no difficulty. Whereas every argument against the self-contemplation of a mind is an argument against the self-enjoyment of an act of mind, the fact that there are many acts of mind shows how it is possible for a man to know his own mind; one act can know another, or any group of others, or the general system of events which is the mind within which it falls, without being required to know itself. For in knowing that mind which it calls "*I*," it does not know all about it; it knows it only as certain particular events or acts. The same applies to our knowledge in general; we do not deem it impossible to learn more about a thing or event than we observed at first. The knowing event, then, might quite easily be one of the unknown characters of the known event.

There is thus no ground for Alexander's statement (p. 17) that only on his view "can we realize that experience declares mind and things to be fellow-members of one world though of unequal rank." It is true that "to be an experiencer of the experienced is the very fact of co-membership in the same world," in other words, that we are related to the things we know, but being related is quite different from knowing or "realizing" that we are related. To be able to say "I know a tree," we must be able to have this before our minds as a single fact, not as broken up into an enjoyed and a contemplated element, which could neither be enjoyed as united nor contemplated as united. If we can contemplate minds and things together, then we are in a position to find, and have found, their "co-membership." Yet Alexander argues that "we miss this truth only because we regard the mind as contemplating itself. If we do so, the acts of mind are placed on

the level of external things, become ideas of reflection in the phrase of Locke ; and thus we think of mind as something over and above the continuum of enjoyments, and invent an entity superior both to things and to passing mental states." If we did, we should certainly be quite unrealistic. But the argument has cogency only on the assumption that thinking of mind is equivalent to thinking of mind's thinking of mind—which is precisely what those who adhered to contemplation and rejected enjoyment would deny.

The question now arises, What of introspection, if it is the case that I cannot contemplate my own mind since I am it ? "Introspection is in fact merely experiencing our mental state, just as in observation of external things the object is contemplated. The accompanying expression in words is extorted from us, in the one case by the object, in the other case by our mental condition. Now, except in refinement and purpose, there is no difference in kind between the feeling expressed in the ejaculation of disgust and the reflective psychological analysis of that emotion. Replace the interjection Ugh ! by a whole apparatus of elaborated speech ; instead of the vague experience of disgust, let us have the elements of the emotion standing out distinct in enjoyment, and we have the full-blown introspection of disgust " (p. 18). Now enjoyment, we may remember, is simply the mental act being itself. Thus at any time disgust is itself, and its elements are themselves, so that at any time we have "the full-blown introspection of disgust." The fact cannot be concealed that "standing out" means being contemplated or observed. But if we adhered to Alexander's expressed theory, we could not possibly determine when an expression was extorted from us by the object and when by our own mental condition. "The contemplation of a contemplated object is, of course, the enjoyment which is together with that object or is aware of it" (p. 12). Thus if we applied *any* of our expressions to the object, we should apply all. But the fact is that we sometimes speak about our own minds and sometimes about other things ; that is, our own minds are sometimes objects to us. Alexander has failed to establish that "my own mind is never an object to myself in the sense in which the tree or table is. Only an *-ing* or an enjoyment may exist in my mind either in a blurred or subtly dissected form." Once more the *-ing* is an *-ed* ; but to say blurring and dissecting would be to admit that the introspection is extrospection or contemplation, not identity. The argument reaches its climax in the statement (p. 19) that "if I could make my mind an object as well as the tree, I could not regard my mind, which thus takes in its own acts and things in one view, as something which subsists somehow beside the tree." That is, because my mind is doing something, therefore I can't do it ! No, these are not arguments which establish the existence of a mind whose character is consciousness and whose consciousness is self-consciousness ; they are the consequences of that *assumption*, they are its *reductio ad absurdum*.

There remains to be considered the question of the experiencing of the relation between the two terms in an experience. It also is experienced ; in short, the whole experience, just because it is an experience, must be experienced.¹ The togetherness of the *-ing* and the *-ed* is "the fact of their belonging together in their respective characters in the situation. But since the one term is an enjoyment and the other a contemplation, and the relation relates the terms, how, it may be asked, is the togetherness experienced ? Is it an *-ing* or an *-ed* ? Now from the angel's point of view I am together with the horse I see and the horse together with me, we are together both. But when we ask how, in the knowing relation, the togetherness is *experienced*, we ask the question from the point of view of the being which has the experience, that is, the mind. Thus the mind in enjoying itself enjoys its togetherness with the horse. It does not contemplate the horse's

¹ As I have argued in another place, we might with equal reason say that a marriage must be married.

togetherness with itself, the mind." We are not permitted, then, before asking how the togetherness is experienced, to ask *whether* it is or not. To know a horse is somehow to know that I know it. But in knowing this, I know the "I know" (*i.e.*, the *-ing* and the relation) by enjoyment and the "it" by contemplation, but neither by enjoyment nor by contemplation can I know that "I know it." This simply will not serve; we should have to enjoy the horse as well, in order to have before our minds "I know the horse" as a single proposition—as we do have it. Or else, we should have to contemplate our minds and their relations of knowing; thus alone could we avoid subsisting for ever on our own enjoyments. Here, again, the distinction breaks down, as Berkeley's theory of notions and ideas breaks down, when he is called on to explain how it is possible to know that "I produced this image." The facts are too much for enjoyments and notions alike.

It is not surprising, in view of the interweaving of opposite strains in his thinking, that Alexander found it impossible to make alterations in his work on the occasion of this new impression. Any serious alteration would have led on to many others. The excision, of which I have tried to show the necessity, of the notion of "enjoyment" would leave few parts of the argument unaffected. It would certainly leave little of the Introduction beyond the contention that mind can be contemplated; and the admission that there are not different ways of knowing would render nugatory a large part of the discussion of knowing in Book III. But the fundamental theory of mind would be substantially the same, since Alexander has for the most part accommodately taken the angel's view; parallelism would be as decisively rejected, and the view, again emphasized in the new Preface, that mental processes are those brain-processes which have the quality, consciousness, would, with the recognition that there is no such quality and that the quality of mind is still to seek, give the clue, as before, to the understanding of the spatio-temporal theory, *viz.*, that all things belong to the single order of *events or propositions*. In such a reconstruction Space-Time would be shorn of the monistic features attached to it, and taken consistently, not as the stuff of which things are made, but, in its other formulation, as the medium in which things are. And with a positive theory of events and of mind would go a positive theory of truth and goodness. The relative theories with which Alexander presents us are imbued with that spirit of conciliation which was the stock-in-trade of his idealist teachers, and which makes this work only a mighty fragment to those who are not prepared to carry out its reconstruction in a different spirit.

JOHN ANDERSON.

REVIEWS.

SOCIAL AND POLITICAL IDEAS OF SOME ENGLISH THINKERS OF THE AUGUSTAN AGE. Edited by F. J. C. Hearnshaw, M.A., LL.D. London: George G. Harrop. 1928. Price: 7s. 6d. net.

This volume continues the series of publications and lecture courses in the University of London under Dr. Hearnshaw's editorship. Once again the lectures are in the form of biographies. The adjective "great," which appeared in the titles of the earlier books of the series, is absent in this. The book deals with Filmer, Halifax, Locke, The Jacobites, Bishop Hoadly, Defoe, Swift, and Bolingbroke. Thus, the implication is that these thinkers were not "great." This is an arguable thesis in the case of Hoadly, Bolingbroke and Halifax, and perhaps even of Defoe and Swift, but it would be generally agreed that it does some injustice to John Locke. Moreover, all adjectives are relative. In previous works of this series other and earlier thinkers have been called great, whose titles to that distinction have been hardly less slender than some of the subjects of the present volume. Is

Sir John Fortescue really much greater than Sir Robert Filmer? And are Defoe and Swift much behind Nicholas of Cusa as exponents of political thought? Possibly, the explanation of the change is the tendency of us all to be more circumspect in dealing with the characters of the periods which begin to approach our own. We are much more ready to recognize the greatness of Cicero and Pompey than of Edmund Burke and Wellington.

The Augustan Age is taken to be that period extending from the Restoration to the accession of George III. This book, therefore, gives us a conspectus of what might be called the eighteenth century. For the lives of these seven thinkers bridge the period which contains most of what is generally regarded as "the eighteenth-century contribution" to English life and thought. This century has had less than justice done to it. It is usually regarded as the cold, formal, compromising period of our history. From it men look back to the enthusiasm of the seventeenth century and forward to the creativeness of the nineteenth century. But the eighteenth century has an interest that is all its own. It is a period of transition, and, like all such periods, must be judged leniently. In between the religious enthusiasm which dominates seventeenth-century thought and the biological interest which pervades the thought of the nineteenth century comes the appeal to reason, with its arguments, its compromises and its formality. As Mr. G. N. Clarke puts it in his introductory essay—the Augustan Age was a period dominated by a mathematical outlook.

It is easy to be superior about the formality and compromise of the eighteenth century, but it is pertinent to remember that it was the age which ushered in toleration in religion. Its keynote is moderation. Halifax, the trimmer, Swift and Defoe in the uncertainties of their political allegiance; these things are held up as unworthy compromises of an unworthy age. Yet compromise is a method of progress. Is it not essentially—especially in political affairs—the same method, with a less high-sounding title, as Plato and Hegel called synthesis? For the essence of compromise is to give as much as you can in order to get as much as you can. This, of course, means bargaining. It is not heroic. It gives us Pope instead of Milton, Halifax in place of Strafford. Yet, on the other hand, it was a method which did admit that you had no monopoly of truth and which did allow for the contribution your opponent had to make. It certainly did not produce splendid deaths in the last ditch of principle, but it did achieve toleration. And its toleration was not attained by mere exhaustion, such as has produced the scepticism of the younger generation of today. Its reasonableness was fought for and attained. Its balance and poise had to be won.

It is in making us realize this that the several contributors to this book have done good service. Also, they bring into prominence the fact that the political thought of the Augustan Age, unheroic as it may have been, was native to England and owed little to foreign influences.

Of the essays in detail there is no space to write. Professor Reed, in his lecture on Halifax, gives his subject full leave to speak for himself, and one gathers from it such characteristic aphorisms as this: "Ignorance maketh most men to go into a party and shame keepeth them from getting out of it"—a shrewd saying that might be commended to students of Edmund Burke. Miss Levett's lecture on Defoe devotes more time to the novelist as an economist and social reformer than as a political thinker, an aspect of Defoe that is not usually considered. And Mr. Driver very approximately points out that Locke's doctrine of property did not imply any absolute right to the unchecked use of property by its owners. For, according to Locke, the law of Nature gives to men only "as much property as anyone can make use of before it spoils." This qualification, so often forgotten in current expositions of Locke's ideas, really ranks him with Tawney and the modern school, which inveighs against the functionless possession of private property which has become so marked in the twentieth century.

On the whole, these composite books have much to commend them. It is a good thing to see this much-discussed century from several viewpoints and, as it were, through the spectacles of seven of its prominent actors, for it is a difficult period to understand. The heroic religious passions were waning, and the stage was being set for a new group of actors whose interests were really political and were later to become politico-economic. But the old religious fervours still marked men off sharply into religious parties. Englishmen were Anglicans, Nonconformists and Roman Catholics. They were also being asked to be Whigs and Tories. But the religious groupings would not dovetail into the political groupings. Hence there were confusion, argument, compromise and trimming. Philosophers expounded religion. Ecclesiastics preached politics. No wonder the Vicar of Bray turned his succession of bewildering somersaults. But the point to observe is that the Vicar of Bray never had his head cut off—nor even his living. The sword and the axe were discarded for the pen and tongue. Out of the welter emerged the idea of equilibrium, taken over from mechanics, which still rules most of our political thinking. Constitutions were to be things of checks and balances—a conception that is enshrined in American political life today. International relations were to be uneasily poised by a balancing of power, a theory which brought about the Triple Alliance and the Triple Entente in 1914. Mercantilists talked of a balance of bargains, which is the basic doctrine of the economic nationalism which has become rampant since 1918. Indeed, it may prove that the most disastrous legacy of the Augustan Age has not been its formality, its argumentation, its coldness, nor its compromise, but its ready acceptance of these analogies from the physical sciences as arguments to be used in political and economic affairs. We have not yet rid ourselves of the loose way of thinking which would place human beings under the control of the laws which govern inanimate things.

G. V. PORTUS.

THE CORRESPONDENCE OF JOHN LOCKE AND EDWARD CLARKE.

Edited, with a Biographical Study, by Benjamin Rand, Ph.D., LL.D.,
Harvard University. London: Oxford University Press. 1927.
Price: 30s. net.

In this volume Dr. Rand adds to the sum of his solid contributions to the study and teaching of the history of philosophy. In this case he has edited and published a large body of new material; the correspondence of Locke with his intimate friend and ally, Edward Clarke, the influential parliament-man of the reign of William III. At a time when so much attention is being turned to the possibilities of philosophy in the directing of practical affairs, it is of very great interest to have such a detailed and intimate account of the channels through which Locke helped to form the policy of the Whig *régime* in its early days. We are provided with a clear picture of Locke in his domestic and political relationships. Fruitful friendships are the key to his career. On the background of his association with the first Lord Shaftesbury, we are shown how his association with Clarke grew out of Locke's matchmaking enterprises, and became in course of time a powerful factor in his political influence upon his age. The emergence of his treatise on education we are here enabled to trace from his interest in Clarke's children and the letters of guidance he addressed to their parents, guidance eagerly sought and highly valued. These letters were written first from Locke's exile in Holland; the supervision was continued after his return. At a later period we see how Locke found in Clarke a Parliamentary spokesman for his ideas on the reform of the currency, and follow him through the vicissitudes out of which they came largely to determine the principles of the English system. We gather that it is in this, together with his departmental employments, that Locke's direct influence upon legislative developments is to be found; he is represented as having little, if any, part in those political

schemes and activities of Shaftesbury through which the Revolution was accomplished.

In education Locke appears as the prototype of objectors to the classical school curriculum and methods, affording in his own person an outstanding example of the man who presses upon others a mode of education radically opposed to that which has made himself what he is. In him we find the true type of the dislike of the unmarried non-householder for the sending of children to the common school; he would keep them at home, with a tutor, in the name of "individual attention." In the present case it is interesting to note that there was a strong tendency to fall back on the theorist himself as the tutor; nobody else seemed quite competent to carry out his system. Nevertheless, he lets it appear that the school is always somewhere in the background, kept as a last resort when the resources of "individual" tuition are exhausted. By whom the school is peopled in the meantime is a question into which Locke does not enter. It all raises the question why a man's recollections of childhood should be allowed an authority in the field of educational method which no one would dream of giving them, or seems to find any difficulty in withholding from them, in other departments of life.

Locke is revealed to us as an inveterate participator in what are entitled in the jargon of our own time "discussion groups." The story of the inspiration of his great Essay by the dialectical predicament to which one of these had been reduced is well known. An interesting, and perhaps important, feature of the present book is that in one of the letters here first published Locke himself assigns an approximate date to the fateful meeting. He places it about ten years (1681-82 *vice* 1670-71) later than that hitherto accepted on the authority of one or other of his friends and colleagues. The author suggests that these latter may well have applied Locke's well-known remark to some earlier meeting, of which there had been many during a long period of years. Dr. Rand points out that Locke had certainly discussed and written upon metaphysical topics before 1681, but that the Essay, in contrast with previous writings, led to a direct and systematic examination of the human understanding itself, "not by others' opinions, but by what I could from my own observations collect myself." The limits of the scope of the present work do not, of course, permit us to see much of Locke's intercourse with his friends of the "scientific" world, men like Boyle and Newton, or to trace their influence on the growth of his philosophy.

The letters also reveal to us incidentally some of the drawbacks of a life devoted to achievements which depend upon "important" friendships, indispensable to humanity as such works and such modes of their accomplishment undoubtedly are. Poor Locke, after the death of the first Shaftesbury, evidently had recurring difficulties in getting the heirs and successors of that nobleman to implement, or refrain from whittling down or making more unsuitable or even humiliating, the conditions of the annuity which Shaftesbury had secured to Locke in return for the service of "the best years of my life." The difficulty that a man's nearest relatives seem to find in realizing the obligations of his friendships is, of course, notorious, and apparently insuperable.

Altogether Dr. Rand's book is a most valuable addition to the resources of the serious student of the period in philosophy and also in "social life." It may put in the hands of certain writers the materials for some more of these "realistic" studies of philosophical history which have such a popular vogue at the present time. But, of course, Dr. Rand is no more accountable for that than are his predecessors in sound scholarship. The style of the editing and comment is as worthy of Harvard as is the book's production of Oxford.

W. ANDERSON.

THE PSYCHOLOGY OF RELIGION. By Charles Conant Josey. New York: The MacMillan Company. 1927. Price: 10s. 6d. net.

A somewhat tardy review of this book must not be taken to indicate a lack of appreciation of its many good qualities. It will serve admirably the purpose for which it was written, *viz.*, to supply the "need for a short elementary textbook on the psychology of religion that will make available to college students and the general reader the most interesting and valuable results of the work of scholars in this field of inquiry."

The University of South Dakota is happy in possessing a teacher who can take such a broad and sympathetic view of the subject. There is nothing here either of the narrow doctrinal standpoint of the "fundamentalist" or of the equally narrow outlook of the strictly empirical psychologist. The author recognizes the need of correlating the phenomena of religious experience with both social life and metaphysical thought. After meeting some objections which are frequently raised against such a study and discussing the various methods—pathological, comparative and genetic—usually employed, the writer states the general principles which he considers especially important for an understanding of religious behaviour. He puts Instinct first. Not that any claim is made for a religious instinct as such. But the main human instincts are regarded as teleological factors embodying interests, desires and purposes that make for the full development of personality, moral and spiritual. The function of Society in promoting this development, especially on its religious side, is well discussed and illustrated by Greek, Hebrew and Christian conceptions. Individual experience is considered in the third and last part of the book, when such topics as conversion, asceticism, prayer and mysticism are discussed. One of the most interesting chapters in this part is entitled "Cult Practices." These are considered as religious customs bearing the sanction of an organized group, designed to establish closer bonds of unity between its members and likely to stimulate loyalty and reverence.

Useful references for further reading are appended to each chapter, and the author concludes with the confident hope that religion will make use of future growth in knowledge and insight to free itself of all superstitions and elevate the race of man.

M. SCOTT FLETCHER.

THE KINGDOM OF THE MIND. By June E. Downey. Young People's Shelf of Science Series: Edited by Dr. E. E. Slosson. New York: The Macmillan Co. 1927. Price: 8s. 6d.

The text is ostensibly written for young people and provides a delightful approach to psychology from the "wonder" side. The style is engaging and frank, and the facts are presented in such a way as to capture and hold the attention. Even for casual adult readers who seek to know what psychology treats of, no happier presentation could be found. The illustrative material is fresh and the presentation frequently novel so that, even for those familiar with the subject, hackneyed facts and principles are presented in a new light that tends to be illuminative of other aspects than the familiar.

A. H. MARTIN.

THE TEACHING OF ARITHMETIC IN THE INFANT AND JUNIOR SCHOOL. By A. Monteith, B.Sc. Harrap & Co.

This volume is a welcome addition to the literature dealing with the teaching of arithmetic, especially to those interested in the number work of the infant school. The outstanding feature is the detailed instruction given, showing how to develop number ideas in young children. The emphasis throughout is on the desirability of developing clear ideas about

number rather than on the necessity of acquiring skill in calculation. The development of number ideas is to be brought about by the use of a variety of number-teaching material which is freely illustrated in the book. The list of material given in the Appendix, with prices and names of supply houses, is useful.

While admitting the value of the features mentioned above, one cannot but say that the development of the ability to calculate is so essentially a part of the primary school curriculum that similar detailed instructions for this, as for the other, are desirable. The lack of such instructions leaves the book somewhat lopsided.

The chapter on notation and the section on the history of weights and measures are attractive; the treatment of fractions, both common and decimal, are good as far as they go; but the impression is that it is inadequate. The chapter on number study presents a type of work too much neglected in schools; though Dudeney's works are probably more helpful here than Ball's. In a book of this character one would expect at least a passing reference to the works of various American writers of outstanding merit (other than Thorndike). Experimental work in general is almost ignored; even the fact that Miss Punnett changed her opinion on the teaching of subtraction because of experimental evidence is not mentioned. In short, any defects of the book are mainly those of omission.

H.J.M.

ALFARABI'S PHILOSOPHY AND ITS INFLUENCE ON SCHOLASTICISM. By Fr. Robert Hamui, O.F.M. Sydney: Pellegrini & Co. Pp. 86. No price mentioned.

A very interesting brochure for the student of the History of Philosophy. It is chiefly a translation direct from the Arabic of a Mahommedan philosopher of the tenth century, whose works are mentioned only cursorily by Stöckl, the Scholastic Historian of Philosophy. By judicious quotations the author seems to have established his contention, that Alfarabi was an original thinker in many metaphysical points in which the Arabian philosophers generally were thought to be little more than adapters of Plato and Aristotle. The main purpose of the author is to show how much the Scholastics owe to Alfarabi. The debt he thinks is most apparent in some of the proofs for the existence of God. Here we think Fr. Hamui has unduly restricted the appeal of his book by giving the quotations from St. Thomas (Aquinas) always in Latin. Now that approved English versions have been published by the English Dominicans, there is less need for such restriction. The quaintness of the English in this brochure, for which the author prepares us in his preface by reminding us he is a foreigner, sometimes obscures the exact meaning of a passage, but that is seldom. It is printed as a manual and the printing is well done; but we expect the Table of Contents at the beginning. Foreign fashion—it is at the end, where we looked for an index and found none. An index, we think, would enhance the value of this excellent little work.

W.R.

JOURNALS RECEIVED.

THE JOURNAL OF PHILOSOPHY. Edited by Professors Woodbridge, Bush and Schneider, Columbia University. Published fortnightly. 4 dollars a year.

Vol. XXV. No. 21. October 11, 1928. On the Nature of Dimension: Benjamin Ives Gilman. No. 22. October 25. The Scientific View of Life: Ralph S. Lillie. No. 23. November 8. The Status of the Data of Experience: John B. Kent. Purpose in the Doctrine of Contradiction

Charles M. Perry. No. 24. November 22. A Theory of Perception : Herman Hausheer. On the Relation of Appearances to Real Things : Homer H. Dubs. No. 25. December 6. Religion and the Philosophical Imagination : Irwin Edman. Substance : Frederick J. E. Woodbridge. Concrete and General in Art Criticism : Leo Stein.

JOURNAL OF PHILOSOPHICAL STUDIES. Edited by S. E. Hooper. Published quarterly for the British Institute of Philosophical Studies, by Macmillan & Co., London. Price : 3s. 6d.

Vol. III. No. 12. October, 1928. Value—Primarily a Psychological Conception : Professor Mary Whiton Calkins. The Confusion of the Concept : Professor William McDougall. The Marriage of Universals (II) : G. R. G. Mure, M.A. Ethics, Psychology, and Sociology : Principal Alfred E. Garvie, M.A., D.D. A Century of Philosophy at University College, London : Professor G. Dawes Hicks, F.B.A. The Philosophy of Social Life : C. Delisle Burns, M.A., D.Lit. The Non-Existence of Matter : C. E. M. Joad, B.A.

THE ECONOMIC RECORD. Journal of the Economic Society of Australia and New Zealand. Melbourne University Press. Price : 5s.

Vol. IV. No. 7. November, 1928. The Problem of Australian Coal : F. R. E. Mauldon. The Australian and American Labour Movements : Carter Goodrich. Australian Loan Expenditure : Sir Lennon Raws. Industrial Arbitration in New Zealand : W. H. Cocker. Railway Maintenance Expenditure in Australia : T. Hytten. The Application of Economic Research to the Agricultural Industries : A. E. V. Richardson. A Brief Review of Rural Credit Facilities in New Zealand : T. D. Hall. The Income Method of Estimating the National Income : J. A. Aird. The Commonwealth Conciliation and Arbitration Act, 1928 : George Anderson.

PSYCHE. Edited by C. K. Ogden. Kegan Paul, Trench, Trubner & Co., London. Published quarterly. Price : 5s.

No. 34. October, 1928. Word Formation : L. W. Lockhart. Word-Values : H. E. Palmer. The Creative Theory : C. A. Claremont. The Evidential Value of Certain Mediumistic Phenomena : E. J. Dingwall. Day-Dreams in the Spanish Ballads : Barbara Aitken. The Individual and the Community : Charles Schiff. Gold : V. A. Demant. Artistic Activity : Curtis Bruen. The Linguistic Barrier in Literary Intercourse : S. Eldridge.

THE INTERNATIONAL JOURNAL OF PSYCHO-ANALYSIS. Official Organ of the International Psycho-Analytical Association. Baillière, Tindall & Cox, London. Price : 30s. per annum.

Vol. IX. Part 4. October, 1928. Narcissism in the Structure of the Ego : Paul Federn. The Problem of Melancholia : Sándor Radó. A Supplement to Freud's "History of an Infantile Neurosis."

ARCHIVES DE PSYCHOLOGIE. Edited by Ed. Claparède. Kundig, Geneva ; Williams & Norgate, London. Price : 4 francs.

Vol. XXI. No. 81. March, 1928. L'Evolution et la Variabilité des Fonctions Psycho-Motrices : Hélène Antipoff. L'Inconscient dans la Contemplation Esthétique : Charles Baudouin. Curiosité Morbide : Dr. Charles Odier. Contribution à l'Etude des Tests de Développement Moteur d'Ozeretzky : Celma Kemal.

ARCHIVIO GENERALE DI NEUROLOGIA, PSICHIATRIA E PSICOANALISI. Edited by M. Levi-Bianchini. Official Organ of the Italian Psycho-Analytic Society. Teramo, Italy. Annual subscription : 8 dollars.

Vol. IX. No. 1. April, 1928. La Citoarchitettonica degli Emisferi Cerebrali di Lenin : Prof. G. Mingazzini. Contributo alla Conoscenza delle Sindromi Psicopatiche da Scompenso : Dr. Antonio Fittipaldi. La Maternità cosiddetta illegittima e l'Aborto criminoso (Il Padre, la Madre e l'Innocente) : Prof. M. Levi Bianchini. Contributo alla Malariaterapia della Schizofrenia : Prof. M. Levi Bianchini e Dr. Jacopo Nardi. L'Encefalite Epidemica nel Carattere e nell'Etica Individuale : Dr. Giovanni De Nigris.

Vol. IX. No. 3. October, 1928. Adenoma dell'ipofisi che occupava il terzo ventricolo, senza sindrome ipofisaria : Dr. Eugenio De Angelis. Un imbecille di rapporto, mistico e omicida : Prof. M. Levi Bianchini. La febbre tifoide nella etiologia delle malattie mentali : Dr. Antonio Fittipaldi. Saggi di Malariaterapia delle epilessie e del parkinsonismo postencefalitico : Prof. M. Levi Bianchini e Dr. Jacopo Nardi.

RIVISTA DI FILOSOFIA NEO-SCOLASTICA. Direction and Administration at Milan, *via* S. Agnese, R. 4. Subscription : L. 28-30.

Vol. XX. Nos. 2-3. March-June, 1928. Una discussione intorno al carattere fondamentale della filosofia scolastica. Il metodo per ripensare le dottrine di Nicolo Machiavelli : Francesco Olgiati. Possibilità e legittimità della gnoseologia pura studiata in rapporto con la filosofia, la psicologia comune e la psicologia pura : Giuseppe Zamboni.

THE BRITISH JOURNAL OF PSYCHICAL RESEARCH. Official Organ of The National Laboratory of Psychical Research, London. 16 Queensberry Place, South Kensington, London, S.W. 7. Price : 1s. Vol. I. No. 1. May-June, 1926. Pseudo-Psychic Manifestations due to Self-Induced Hysteria : Harry Price. A Model Psychic Laboratory.

WELFARE WORK. The Journal of the Institute of Industrial Welfare Workers. 29 Gordon Square, London, W.C. 1. Price : 5s. per annum.

THE MEDICAL JOURNAL OF AUSTRALIA. Published weekly by the Australasian Medical Publishing Co., Seamer Street, Glebe, Sydney. Price : 1s.

This Journal frequently contains articles of interest to our readers on Psychiatry and Psychological Medicine.

NOTES AND NEWS.

Mr. R. P. Anschutz, who has just been appointed to a lectureship in the Department of Philosophy at Auckland University College, has received notification from the University of Edinburgh of the acceptance of his thesis for the Degree of Ph.D. Dr. Anschutz for the past two years has been studying philosophy at Edinburgh, under the direction of Professor A. E. Taylor, as a post-graduate scholar of the University of New Zealand. He is a former student of Auckland University College. The subject of his thesis was "The Ontological Argument."

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The Seventh Annual Meeting of the Association will be held in Sydney in May. As usual there will be a Congress in conjunction with the Annual Meeting.